

**Part 1.**  
**Progress on Poverty and**  
**Shared Prosperity**





# Global Poverty: The Biggest Setback in Decades

## Summary

Poverty and Shared Prosperity 2020: Reversals of Fortune *predicted that the COVID-19 pandemic would be a once-in-a-generation shock, causing the first increase in global poverty in at least 25 years and reversing decades of global poverty reduction (World Bank 2020a). Two years later, this chapter draws on a considerable body of data to show that 2020 was indeed a historic reversal in global progress on reducing extreme poverty and inequality. The number of people living in extreme poverty likely rose by 11 percent in 2020, pushing poverty 1.2 percentage points higher than projections going into the year (extreme poverty had been expected to fall). Thus 90 million more people were living in extreme poverty in 2020 than had been forecast.*

*Since 2020, progress in reducing poverty has been slow and highly uneven. Nowcasts reveal that poverty reduction resumed in 2021, but only at prepandemic rates and not fast enough to recover the ground lost in 2020. Projections in 2022 suggest the pace of poverty reduction will further stall as the global growth prospects dim because of the Russian invasion of Ukraine and a growth slowdown in China. Higher food and energy prices hurt the poor in the short run and may increase the number of poor, although higher prices may have positive income effects in the long run because many poor households are net producers of food or earn their income in the agriculture sector.*

*In presenting the World Bank's first official global poverty estimates for 2019, this chapter describes how the world entered the COVID-19 crisis already in a weak position from a global poverty reduction perspective. The target of ending poverty in 2030 was already slipping out of reach, and extreme poverty reduction progressed more slowly between 2014 and 2019 than previously. The substantial shock in 2020 and the weak recovery of losses since then have further set back progress by four years. By 2030, the poverty rate is expected to be 7 percent, much higher than the target of 3 percent. Reaching the target looks increasingly hard. There is an urgent need to correct course.*

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**Chapter 1 online annexes available at <http://hdl.handle.net/10986/37739>:**

**1A.** PIP Data and Methodology for the Measurement of Extreme Poverty; **1B.** Additional Results on the Shift to 2017 PPPs; **1C.** Global, Regional, and Country Estimates at the US\$2.15 Poverty Line; **1D.** Global and Regional Estimates at Higher Poverty Lines: US\$3.65 and US\$6.85 a Day; **1E.** Societal Poverty; **1F.** Nowcasts of Global Poverty; and **1G.** Nowcasting Poverty in 2020 in India.

## Setting the scene: Poverty on the eve of the pandemic

### Extreme poverty was falling at a slower place

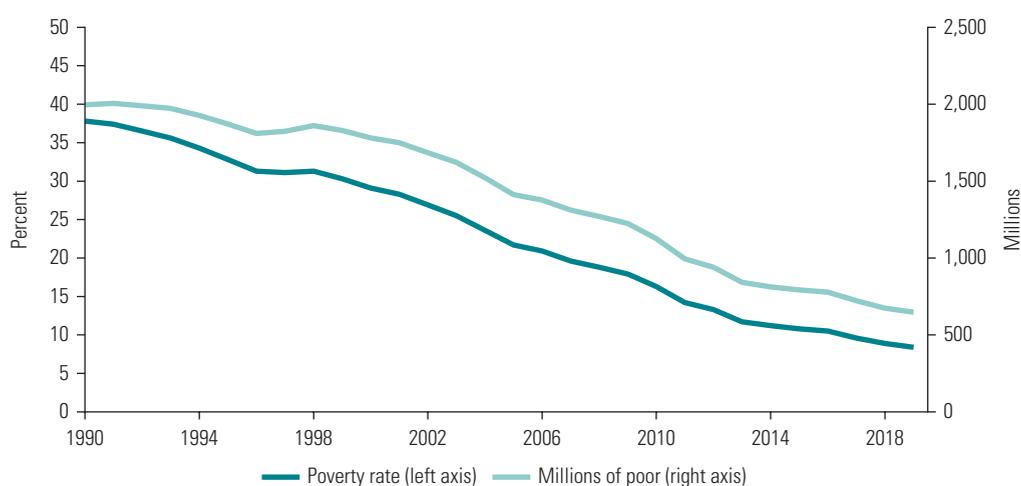
The world has changed dramatically during the last two years, and these changes have profoundly affected the breadth and depth of poverty. The starting point for documenting these impacts is the World Bank's official regional and global poverty estimates for 2019, the eve of the pandemic. According to these estimates, 8.4 percent of the global population (648 million people) lived in extreme poverty prior to the start of the pandemic. On average, each person living in extreme poverty lived on 30 percent less income per day than the international poverty line. These numbers represent lives lived in great hardship, and at the start of the pandemic these numbers were well above where they had to be to eradicate the scourge of extreme poverty by 2030.<sup>1</sup>

Although too high, these numbers represent a continued decline in global poverty. Global poverty was 1.2 percentage points lower in 2019 than in 2017. However, these numbers reveal that progress was slowing before the pandemic hit. From 1990 to 2013, the global poverty rate declined from 37.8 percent to 11.7 percent, corresponding to over a billion fewer people living in extreme poverty. The end of this period recorded strong poverty reduction: the poverty rate fell, on average, by 1.4 percentage points per year between 2008 and 2013, or 86 million people per year. However, the pace of poverty reduction began to slow around 2014 (figure 1.1). Between 2014 and 2019, the pace of poverty reduction slowed to only 0.6 percentage point per year, or 33 million people per year (see table 1C.1, panel a, in online annex 1C) with South Asia as the only region that maintained a rapid rate of poverty reduction.<sup>2</sup> Thus the pandemic hit a world that was seeing slowing progress toward the 2030 goal of eradicating poverty, as discussed in the 2018 and 2020 editions of *Poverty and Shared Prosperity* (World Bank 2018, 2020a).

The global estimates presented in this edition of *Poverty and Shared Prosperity* incorporate two key updates to the calculations of the global poverty number. First, the report adopts the 2017 purchasing power parities (PPPs), as announced by the World Bank in May 2022 (Filmer, Fu, and Sánchez-Páramo 2022; Jolliffe et al. 2022; Tetteh Baah et al. 2022). The new PPPs use more recent price data for converting country-level household welfare measures into an international

**FIGURE 1.1**

**Global extreme poverty has continued to fall but at a slower rate in recent years**



Source: World Bank, Poverty and Inequality Platform, <https://pip.worldbank.org>.

Note: The figure shows the poverty rate and number of poor at the international poverty line of US\$2.15 (2017 PPP) per person, per day. See box 1.1 for more details on the adoption of 2017 PPPs that are used for monetary poverty measures throughout the chapter. PPP = purchasing power parity.

price standard and thus contribute to a better understanding of current living standards around the world. Adopting the 2017 PPPs also affects the derivation of the international poverty line. The global and regional poverty rates in this chapter use the new value of the international poverty line, US\$2.15 (revised from the US\$1.90 value used with the 2011 PPPs in previous editions of this report). Box 1.1 provides more information on the shift to the 2017 PPPs, and online annex 1B discusses in greater detail the changes in the global and regional poverty estimates stemming from adoption of the new international poverty line. The increase in the international poverty line from US\$1.90 to US\$2.15 primarily reflects the difference between 2017 and 2011 nominal dollar values. The change in the global poverty rate due to the change in poverty line is thus negligible. Extreme poverty decreases slightly, by 0.3 percentage point, to 8.4 percent, reducing the global count of the extreme poor by 20 million. The trends in global and regional

### **BOX 1.1**

#### **How the new international poverty lines were derived**

In May 2020, the International Comparison Program (ICP) released new purchasing power parities (PPPs) based on price data collected in 176 economies in 2017 (World Bank 2020b). Poverty estimates are often updated with new PPP data to reflect new information on price differences across countries. Related statistics such as gross domestic product (GDP) are similarly updated with new PPPs. When switching to a different base year (in this case, 2017), two revisions are made. First, the consumption aggregate of each household is converted into dollars of the new base year using the new price information. Second, the poverty line used to assess whether a household is poor is also updated to the new base year. This box is an overview of the new poverty lines, and further details are available in Jolliffe et al. (2022).

#### **What is the international poverty line?**

The international poverty line is a standard that has been used to shape key policy actions on global poverty—see, for example, Sustainable Development Goal 1 (United Nations 2017). In 1990, the World Bank introduced the dollar-a-day poverty line and has since followed the approach of basing the international poverty line on the national poverty lines of some of the poorest countries in the world, expressed in PPPs (World Bank 1990). The global line has been revised each time the ICP has released a new round of PPPs—from US\$1.00 (1985 PPP) to US\$1.08 (1993 PPP) to US\$1.25 (2005 PPP) to US\$1.90 (2011 PPP).

The starting point of deriving the international poverty line and the higher absolute poverty lines is a new set of national poverty lines calculated around 2017 and converted to 2017 PPPs.<sup>a</sup> The international poverty line is derived as the median of the national poverty lines of low-income countries (LICs), while the higher absolute poverty lines are the median national poverty lines of lower-middle-income countries (LMICs) and upper-middle-income countries (UMICs). In 2011 PPPs, US\$1.90 was the median for LICs, US\$3.20 for LMICs, and US\$5.50 for UMICs.<sup>b</sup> In 2017 PPPs, US\$2.15 was the median national poverty line for LICs; US\$3.65 was the median line for LMICs; and US\$6.85 was the median for UMICs (see table B1.1.1). The change in the line for UMICs was relatively large, driven by an increase in the real value of national poverty lines in UMICs between 2011 and 2017.<sup>c</sup> One way to show this change in poverty lines is to express the US\$1.90, US\$3.20, and US\$5.50 poverty lines in constant 2017 US dollars and observe real changes in their value between 2011 and 2017. Figure B1.1.1 illustrates the fact that the lower lines are virtually unchanged in real terms, whereas the UMIC line increases significantly, reflecting a *real* increase in the value of the line.

The selection of US\$2.15 as the international poverty line is robust to several methodological choices, as Jolliffe et al. (2022) explain in detail. It is robust to using the method that underpinned

*(continued)*

**BOX 1.1**

**How the new international poverty lines were derived (continued)**

**TABLE B1.1.1**

**Derivation of global poverty lines, 2011 PPPs versus 2017 PPPs**

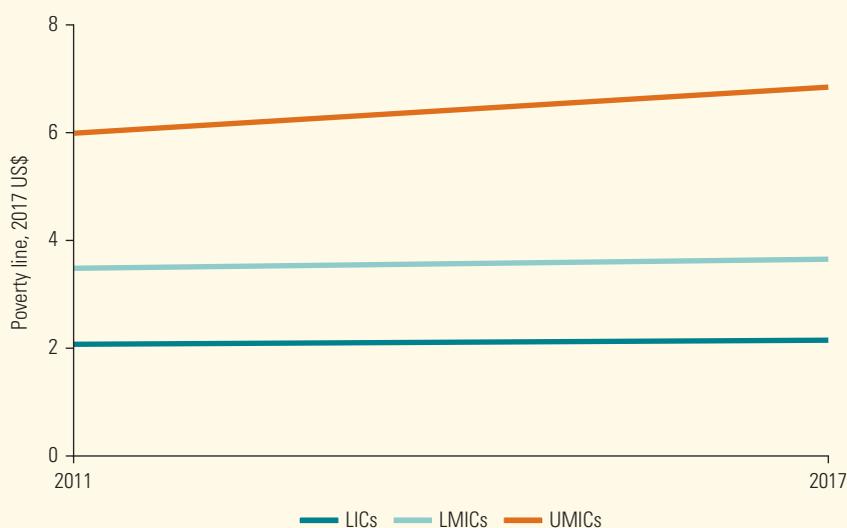
Country income group	2011 PPPs			2017 PPPs		
	Median (US\$)	Rounded (US\$)	Number of observations	Median (US\$)	Rounded (US\$)	Number of observations
Low-income	1.91	1.90	33	2.15	2.15	28
Lower-middle-income	3.21	3.20	32	3.63	3.65	54
Upper-middle-income	5.47	5.50	32	6.85	6.85	37
<b>Total</b>			<b>97</b>			<b>119</b>

Source: Jolliffe et al. 2022.

Note: PPPs = purchasing power parities.

**FIGURE B1.1.1**

**Poverty lines expressed in constant 2017 US\$**



Source: Original calculations based on Jolliffe et al. 2022.

Note: The figure compares the 2011 purchasing power parity (PPP) and 2017 PPP poverty lines when the former are expressed in 2017 US dollars using US inflation from 2011 to 2017. It shows how much of the increase in the lines can be explained by US inflation alone. Note that this does *not* reveal whether the real value of the lines between the two PPP rounds is constant, because changes in the purchasing power of the US relative to other countries from 2011 to 2017 are unaccounted for. For details, see Jolliffe et al. (2022). LICs = low-income countries; LMICs = lower-middle-income countries; UMICs = upper-middle-income countries.

the choice of the US\$1.90 line in 2011 PPPs. That method used the national poverty lines from the same set of poorest 15 countries that was used with the 2005 PPPs.<sup>d</sup> This method with the 2017 PPPs results in a poverty line of US\$2.10. The current method has several advantages, and it offers a consistent way of deriving the international poverty lines as well as the higher absolute poverty lines.<sup>e</sup> The value of US\$2.15 is also robust to choosing different sets of poorest countries.

(continued)

**BOX 1.1****How the new international poverty lines were derived (continued)**

As described in detail in online annex 1B, switching from the 2011 PPPs to the 2017 PPPs and updating the poverty lines accordingly slightly change the estimates of the poverty headcount rate at the global and regional levels. Yet these modifications mask much larger changes in country-level poverty estimates. This issue disproportionately affects countries in western and central Africa—the region in which the largest share of the population lives in countries where the PPPs and consumer price indexes moved very differently between 2011 and 2017, and poverty estimates therefore changed significantly.<sup>†</sup> The 2017 PPP data generally are of higher quality than the 2011 PPP data (Jolliffe et al. 2022; World Bank 2020b). Some countries were affected by severe shocks—including the Ebola crisis and the collapse of commodity prices—when the 2017 PPP data were being collected. For these countries, additional analysis using the detailed microdata that underpin the PPPs may be needed to understand what drives the differences between the 2011 PPPs and 2017 PPPs, as well as the knock-on effects on poverty estimates.

**Complementary measures of poverty**

The adoption of the new 2017 PPPs also affects two other official poverty measures used by the World Bank: the societal poverty line (SPL) and the multidimensional poverty measure (MPM).<sup>9</sup>

The SPL combines elements of absolute and relative poverty measures, and it captures the notion that the definition of poverty evolves as countries get richer. Jolliffe and Prydz (2021) derive the SPL with the 2011 PPPs as  $\max(1.90, \$1.00 + 0.5 * \text{Median})$ , where *Median* denotes median income or consumption of the country. With the 2017 PPPs, the SPL is updated to  $\max(2.15, \$1.15 + 0.5 * \text{Median})$ . The international poverty line remains the floor of the SPL, the intercept term changes from US\$1.00 (2011 PPP) to US\$1.15 (2017 PPP), and the slope parameter remains unchanged.<sup>h</sup> The MPM goes beyond monetary poverty by including two nonmonetary dimensions of well-being in classifying households as multidimensionally poor: access to basic infrastructure and access to education—see chapter 4 in World Bank (2018) and box 1.1 in World Bank (2020a). In the MPM, the international poverty line is used as an indicator for the monetary dimension. Thus a person will be considered poor in the monetary dimension if that person lives on less than US\$2.15 (2017 PPP) a day (an analysis of multidimensional poverty appears in chapter 3).

a. The methodology uses the implicit poverty line approach, first proposed by Jolliffe and Prydz (2016). The authors rely on a data set of survey-based national poverty lines harmonized so they are all in per capita units. The harmonization process involves retrieving the percentiles from income or consumption distributions expressed in PPP per capita terms that correspond to national poverty rates. The national poverty rates are reported in the World Bank's World Development Indicators database (<https://databank.worldbank.org/source/world-development-indicators>) and rely on countries' own definitions of poverty. Thus the resulting international poverty line reflects the standard of poverty in the poorest countries, but it is also calculated using comparable national poverty measures. Jolliffe and Prydz then selected for each country in this harmonized data set the survey-based poverty line that is closest to the ICP reference year, thereby limiting the sensitivity of the international poverty line to changes in historical consumer price index data. Eighty-four percent of selected surveys were conducted after 2011, and 43 percent were conducted in 2017. More than three-quarters of selected surveys were conducted within three years of 2017. Finally, the subset of national poverty lines is aggregated by income group based on the World Bank's income classification in the survey year. The international poverty line is derived as the median line of all low-income countries.

b. The poverty lines based on 2011 PPPs were derived using two different methodologies. More details can be found in Tetteh Baah et al. (2022) and Jolliffe et al. (2022).

c. The revisions to the lines can be explained not only by PPP updates but also by changes in national poverty lines, changes in income classifications of countries, revisions of welfare aggregates, and the inclusion of new countries and data. The change in the UMIC line is largely explained by real upward shifts in the national poverty lines of those countries after controlling for the other factors. The PPP updates solely explain the changes in the international poverty line and the LMIC line.

*(continued)*

**BOX 1.1****How the new international poverty lines were derived (*continued*)**

d. The US\$1.90 poverty line was based on national poverty lines of 15 poor countries with data from the 1980s and 1990s (Ferreira, Jolliffe, and Prydz 2015; Ferreira et al. 2016; Ravallion, Chen, and Sangraula 2009). The US\$1.90 line is the arithmetic mean of the 15 PPP-based national poverty lines updated from 2005 PPPs to 2011 PPPs.

e. The methodology used to derive the new official poverty lines also addresses some of the concerns raised by experts and scholars after past revisions of the poverty line (Deaton 2010; Klasen et al. 2016; Reddy and Pogge 2010). The first concern was that it may be hard to argue that the sample of countries traditionally used to derive the international poverty line is representative of the poorest countries in the world in more recent years. Moreover, the selection of the 15 countries in the sample lacks statistical support. The selection was based on the empirical finding that, for countries with such low levels of consumption, national poverty lines are not correlated with the per capita household final consumption expenditure. For countries with higher incomes, there is a positive relationship between national poverty lines and per capita household income. With more recent data, however, national poverty lines (in logs) and per capita household final consumption expenditure (in logs) are positively correlated at all levels on consumption (Jolliffe and Prydz 2016). The second concern was that the derivation of the US\$1.90 poverty line was highly sensitive to the consumer price indexes available for those countries, which are used to deflate to the ICP reference year. The third concern was that the national poverty lines of the 15 poor countries were not expressed in comparable units, with some in per capita terms and others in adult-equivalent. Finally, expressing the US\$1.90 international poverty line as the mean, as opposed to the median, across national poverty lines of a reference group of poorest countries makes it vulnerable to outliers.

f. See Ferreira et al. (2013) and Jolliffe et al. (2022) for details.

g. See World Bank (2018, 2020a) for more details on these poverty measures.

h. The analysis in Jolliffe et al. (2022) shows an intercept parameter of US\$1.15 and a slope parameter of 50 percent when the same regression model used to derive the original societal poverty line parameters (in 2011 PPPs) is reestimated using more recent data (for circa 2017) in 2017 PPPs. Furthermore, the intercept is expected to change because it is expressed in PPP dollars—see Jolliffe et al. (2022) for details and the impact on global and regional profiles of societal poverty.

poverty using the 2017 PPPs are the same as the trends using the 2011 PPPs. All trends discussed in this chapter are based on the 2017 PPPs.

Second, the global and regional poverty estimates presented in this chapter include new data for India for 2015–19—see box 1.2 and Castaneda Aguilar et al. (2022b) for technical details. Inclusion of these data represents an improvement over the previous edition of this report, where the absence of recent data for India severely limited the measurement of poverty in South Asia.<sup>3</sup> According to the latest poverty estimates for the region, poverty reduction continued between 2014 and 2019. The poverty headcount rate declined from 18 percent in 2014 to 9 percent in 2019—a smaller decline in poverty reduction than what was previously estimated for global poverty measurement purposes and a revision of the global poverty trend (see box 1.2).

These two methodological changes are reflected in the analysis presented in this report. This chapter now turns to analysis of the regional distribution of the poor to better place in context the geographic impacts of the pandemic as well as the differential impacts by income group.

### **Among regions, extreme poverty remained highly concentrated in Sub-Saharan Africa**

In 2019, extreme poverty remained highly concentrated in Sub-Saharan Africa (figure 1.2 and map 1.1) and in fragile and conflict-affected economies. Sub-Saharan Africa accounted for 60 percent of the global poor at the US\$2.15 poverty line in 2019 (figure 1.2). Thirty-five percent of the population (389 million) in the region lived below the international poverty line (figure 1.3). People residing in fragile and conflict-affected economies represented about 10 percent of the global population, but almost 40 percent of the global poor—see table 1C.3 in online annex 1C and Corral et al. (2020) for an extensive analysis.

**BOX 1.2****New data now available to measure poverty in India**

The most recent survey data released by the National Sample Survey Office of India used to measure poverty is the 2011/12 National Sample Survey (NSS). The government decided not to release the 2017/18 NSS round because of concerns about data quality—see box 1.2 in World Bank (2020a). Because of India’s size, the lack of recent survey data for the country significantly affects the measurement of global poverty, as was evident in *Poverty and Shared Prosperity 2020*.

This report includes global and regional poverty estimates based on the new household survey data for India for 2015/16, 2016/17, 2017/18, 2018/19, and 2019/20 from the Consumer Pyramids Household Survey (CPHS) conducted by the Centre for Monitoring Indian Economy, a private data company. The household consumption data used for poverty monitoring are based on an analysis by Sinha Roy and van der Weide (2022).

The main advantage of the CPHS data is that they facilitate the measurement of poverty in India for the period 2015–19, thereby considerably improving estimation of poverty in the country and the world in recent years. However, the CPHS data do have some limitations and differ from the official NSS data traditionally used for global poverty monitoring. For example, concerns have been raised about the sampling and the fact that the consumption aggregate is not directly comparable with the NSS (Dreze and Somanchi 2021).

To address these issues, Sinha Roy and van der Weide (2022) make several adjustments to the CPHS data. They reweight the data with the objective of transforming the CPHS into a nationally representative survey and correcting for the sampling biases.<sup>a</sup> In addition, they transform the measured CPHS consumption into an NSS-type consumption measure for each year of data. Sinha Roy and van der Weide also compare their results with a wide range of supplementary data that show broadly similar trends.

Other methods have been employed to estimate the state of poverty in India since 2011. Bhalla Bhasin, and Virmani (2022) use a mixed approach, largely relying on the gross domestic product growth rate along with corollary assumptions to project poverty from the 2011/12 NSS. The methodological differences between Bhalla, Bhasin, and Virmani (2022) and Sinha Roy and van der Weide (2022) have been outlined elsewhere (Ravallion 2022; Sandefur 2022). Because there is widespread agreement that microdata from household surveys are necessary to credibly measure poverty, this report uses the Sinha Roy and van der Weide (2022) methodology. Other published analyses also use the CPHS for assessing recent changes in welfare in India (for example, Gupta, Malani, and Woda 2021). Meanwhile, the National Sample Survey Office is conducting a household survey in 2022 that will provide updated official statistics on poverty for India.

The data reveal that poverty has declined in India since 2011, driven by a larger poverty reduction in rural areas (Sinha Roy and van der Weide 2022). Even though overall poverty has declined, it is by less than what earlier estimates used for global poverty measurement would suggest. Previous estimates suggested a poverty headcount rate at the US\$1.90 poverty line of 10.4 percent in 2017, with a 95 percent confidence interval of between 8.1 and 11.3 (World Bank 2020a). The latest estimate based on Sinha Roy and van der Weide (2022) shows that poverty at the US\$1.90 poverty line was 13.6 percent in 2017.

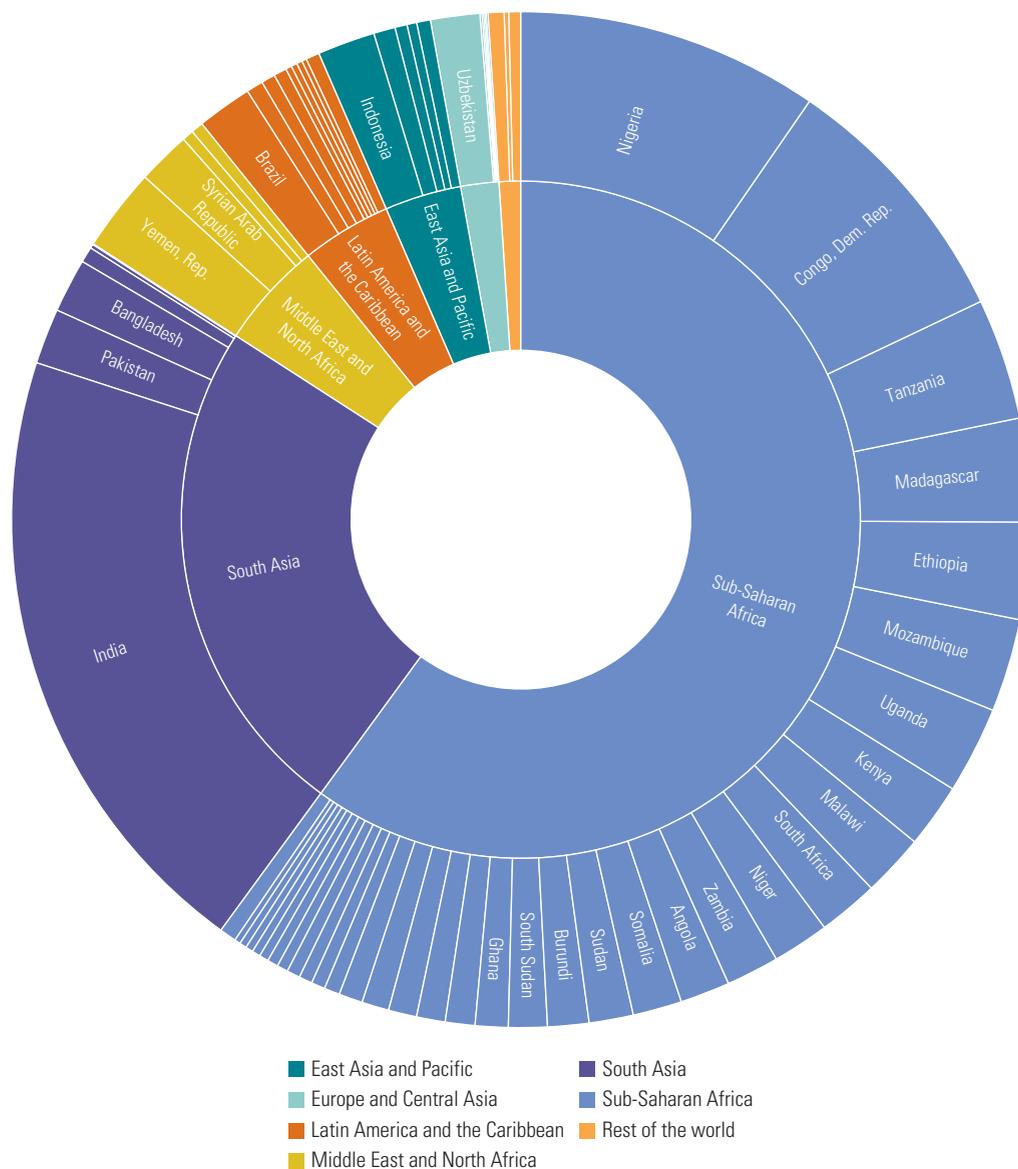
The estimates used for this report adopt the 2017 purchasing power parities and show that the national poverty headcount rate at the US\$2.15 poverty line in India was 10 percent in 2019/20—12 percent in rural areas and 6 percent in urban areas (see table 1C.2 in online annex 1C).<sup>b</sup> The new data for India also allow the South Asia trend to be published and drive a revision in the poverty trend for South Asia. The poverty headcount rate at the US\$2.15 poverty line was 9 percent in South Asia in 2019.

a. The CPHS sample has evolved over time but settled after the first round of data collection in 2014/15. For this reason, the first round of CPHS data covering the period 2014/15 was not added to the World Bank’s Global Monitoring Database. Only CPHS-based poverty estimates for survey years in or after 2015/16 are part of the survey data available in the Poverty and Inequality Platform for global poverty monitoring and underlie the regional and global poverty estimates in this report.

b. The lined-up estimate for India that underpins the global and regional poverty aggregates in 2019 is 9.5 percent—10.9 in rural areas and 6.7 percent in urban areas.

**FIGURE 1.2**

**The global extreme poor are concentrated in Sub-Saharan Africa**

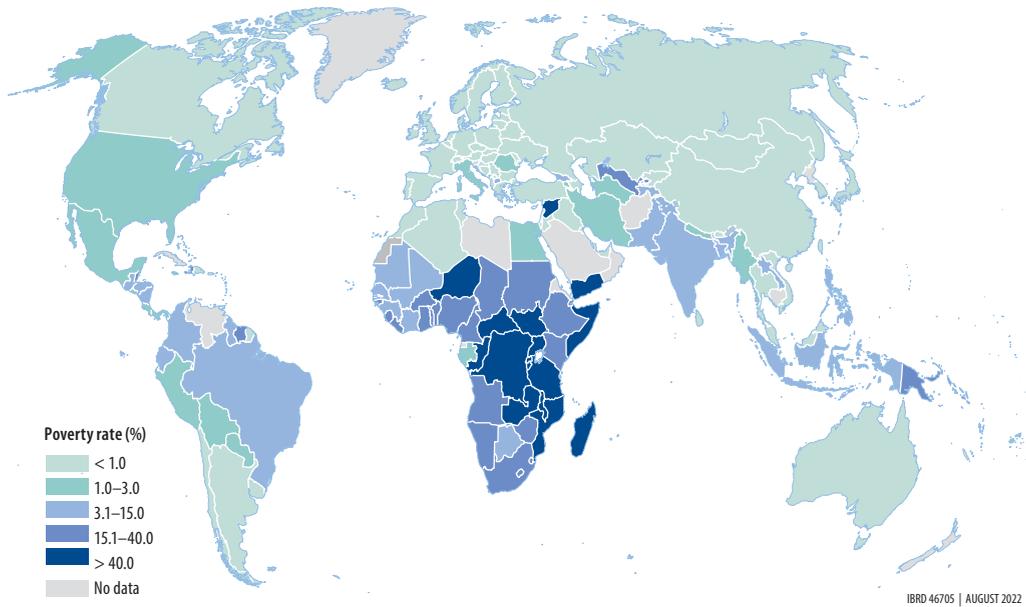


Source: World Bank, Poverty and Inequality Platform, <https://pip.worldbank.org>.

Note: The figure shows the distribution of the poor population at the US\$2.15-a-day poverty line in 2019, by region and economy. For each economy, the number of poor is calculated using the economy-level poverty estimate that underlies the global poverty estimate (see section "Calculating global and regional poverty" in online annex 1A to see how this is calculated) and the population in 2019.

**MAP 1.1**

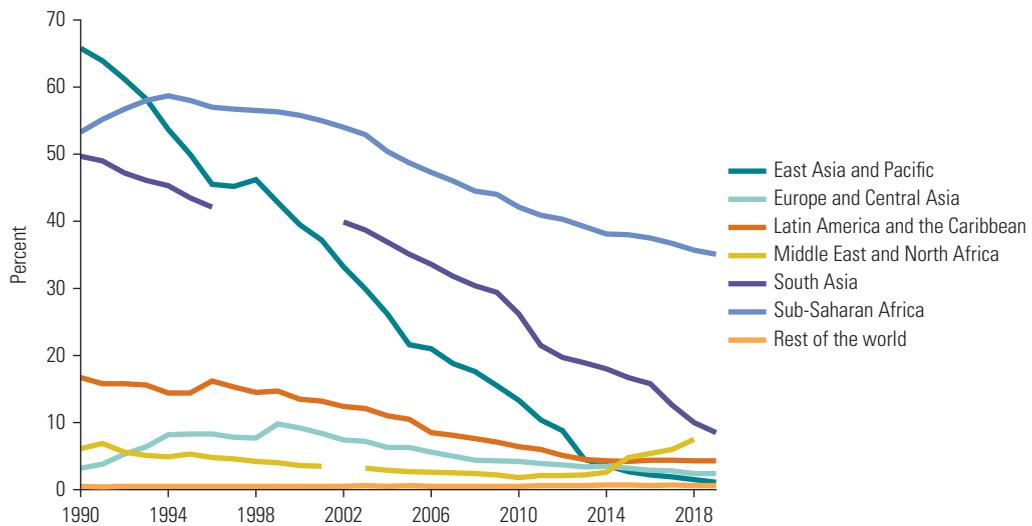
**In 2019, countries with the highest poverty rate at the US\$2.15-a-day poverty line were mostly in Sub-Saharan Africa**



Source: World Bank, Poverty and Inequality Platform, <https://pip.worldbank.org>.  
 Note: The map shows each economy's poverty headcount rate at the US\$2.15-a-day poverty line for 2019. Economies without survey data available in the Poverty and Inequality Platform are shown in gray.

**FIGURE 1.3**

**From 1990 to 2019, poverty fell in all regions except the Middle East and North Africa**



Source: World Bank, Poverty and Inequality Platform, <https://pip.worldbank.org>.  
 Note: The figure shows poverty trends at the US\$2.15-a-day poverty line, by region, 1990–2019. Poverty estimates are not reported when regional population coverage is below 50 percent within a three-year period before and after the reference year (see online annex 1A).

The regional poverty rate in Sub-Saharan Africa is lower than what was previously reported (Castaneda Aguilar et al. 2022a; World Bank 2020a). The lower rate is largely driven by adoption of the new 2017 PPPs, which reduce the regional poverty rate in 2019 by about 3 percentage points (see online annex 1B). Sub-Saharan Africa shows the largest changes in the levels of poverty when moving from the 2011 PPPs to the 2017 PPPs (Jolliffe et al. 2022).<sup>4</sup> Nevertheless, poverty remains highly concentrated in Sub-Saharan Africa, with a poverty rate that is about four times higher than that of the second-poorest region in the world, and the evidence on the pace of poverty reduction in the region is unaffected. The poverty headcount rate continues to fall, from 37 percent in 2017 to 35 percent in 2019 (figure 1.3). This masks considerable heterogeneity in poverty reduction across countries in Africa, with some countries seeing poverty increasing and others falling. However, high population growth in the region means that the number of people in poverty has increased, from 385 million to 389 million (see table 1C.1, panel c, in online annex 1C).

Sub-Saharan Africa is also the region in which the largest share of the population lives in countries in which the PPPs and consumer price indexes moved very differently between 2011 and 2017, requiring further scrutiny (box 1.1). More generally, analysis of poverty in Sub-Saharan Africa remains affected by issues of data availability and quality. Although new data for Nigeria and newly available data for 2018 for 10 countries in West Africa significantly improve the understanding of poverty in West Africa (Castaneda Aguilar et al. 2022a; Lain, Schoch, and Vishwanath 2022), data have become less available in other parts of the region. As a result, overall the share of the population in Sub-Saharan Africa living in a country with a survey within a three-year period declined from 79 percent in 2017 to 55 percent in 2019 (see table 1C.4 in online annex 1C).<sup>5</sup> Ensuring timely, high-quality data collection across Africa will become increasingly important for the assessment of global extreme poverty because a larger share of the global extreme poor continues to reside in the region.

The implications of data scarcity for global poverty and monitoring progress toward the 2030 goal are severe and are a recurrent topic of discussion in this chapter and chapter 2. In addition, for better survey coverage in Sub-Saharan Africa, survey coverage in fragile and conflict-affected situations is increasingly important. Data coverage of this group improved between 2017 and 2019. In 2017, 43 percent of the population in this group lived in a country with a survey. By 2019, this share had gone up to 50 percent (see table 1C.4 in online annex 1C).

Because of missing data, a regional estimate for 2019 for the Middle East and North Africa cannot be reported. With this caveat in mind, the Middle East and North Africa is the only region where, driven mostly by the situation in fragile and conflict-affected economies, the poverty headcount rate has been increasing since 2014 (figure 1.3). The rate in the region was 7.5 percent in 2018, or three times higher (at 2.6 percent) than in 2014 (see table 1C.1, panel b, in online annex 1C). However, as noted before, these estimates are subject to a high degree of uncertainty because of lack of recent data on the Syrian Arab Republic and the Republic of Yemen.

As discussed later in the section on nowcasting, additional COVID-19–related disruptions of the household survey data collection process present a challenge in data availability everywhere. Surveys conducted during 2020 confirm that the pandemic has had an impact on data collection methods and on the definition of the household welfare measure.<sup>6</sup> Those impacts pose an additional challenge for this report because they limit the availability of household survey data for 2020.<sup>7</sup> Of the 169 countries with survey data used to calculate the global and regional poverty estimates presented in the report, only 20 countries so far have an official estimate for 2020 in the World Bank's Poverty and Inequality Platform (PIP).<sup>8</sup> By contrast, 85 countries have survey data available for 2018 and 61 for 2019. Moreover, the available surveys are not equally distributed across regions. Of the 20 available surveys for 2020, 12 are for countries in Latin America and the Caribbean, six are for countries in Europe and Central Asia, and two more surveys are available for Indonesia and Thailand.

## Extreme poverty was high among children, and the poor were less connected online

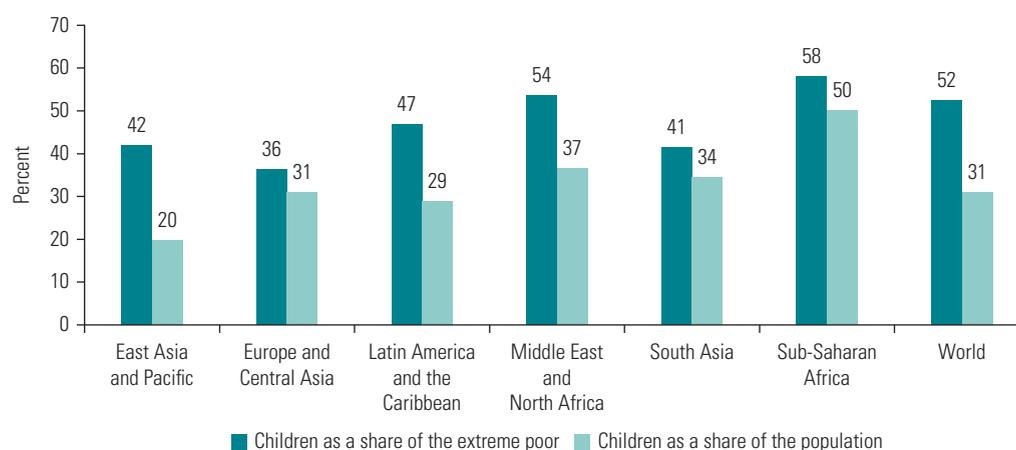
*Poverty and Shared Prosperity 2020* provides a detailed assessment of the characteristics of poor people using data from the Global Monitoring Database (GMD), which combines information on the poverty status of households with characteristics of those households (World Bank 2020a). These characteristics change very slowly over time. Analysis using the updated GMD finds a very similar pattern in 2019 to that in 2017: extreme poor households are more likely than other households to live in rural areas, are more likely to be engaged in agriculture, and are more likely to have more children, but are not more likely to have a larger share of women (see online annex 1C).

One of the most striking findings of the analysis in *Poverty and Shared Prosperity 2020* was the high levels of poverty among children. Figure 1.4 shows children 17 years and younger as a share of those living in extreme poverty and as a share of the total population. In every region of the world, children are more likely to be poor, and this difference is particularly pronounced in the East Asia and Pacific, Latin America and the Caribbean, and Middle East and North Africa regions. Because of the very differential impacts of the COVID-19 crisis on people of different age groups, this difference will be subject to analysis later in this chapter.

Another characteristic of households is their access to electricity and telecommunications. During the COVID-19 crisis, access to online content and services became particularly important as people avoided face-to-face contact. Figure 1.5 shows the degree to which the extreme poor had access to electricity and mobile phones on the eve of the crisis in 2019. Access to electricity was significantly lower among extreme poor households: 37 percent, compared with 78 percent, on average, globally. A similar pattern is observed for mobile phones. Although 84 percent of the world's population lived in a household with at least one mobile phone, only 55 percent of people living in extreme poverty did. The figures show very clearly the disadvantage faced by those in extreme poverty in accessing goods and services during periods of social distancing.

**FIGURE 1.4**

### Poverty rates are higher among children in every region

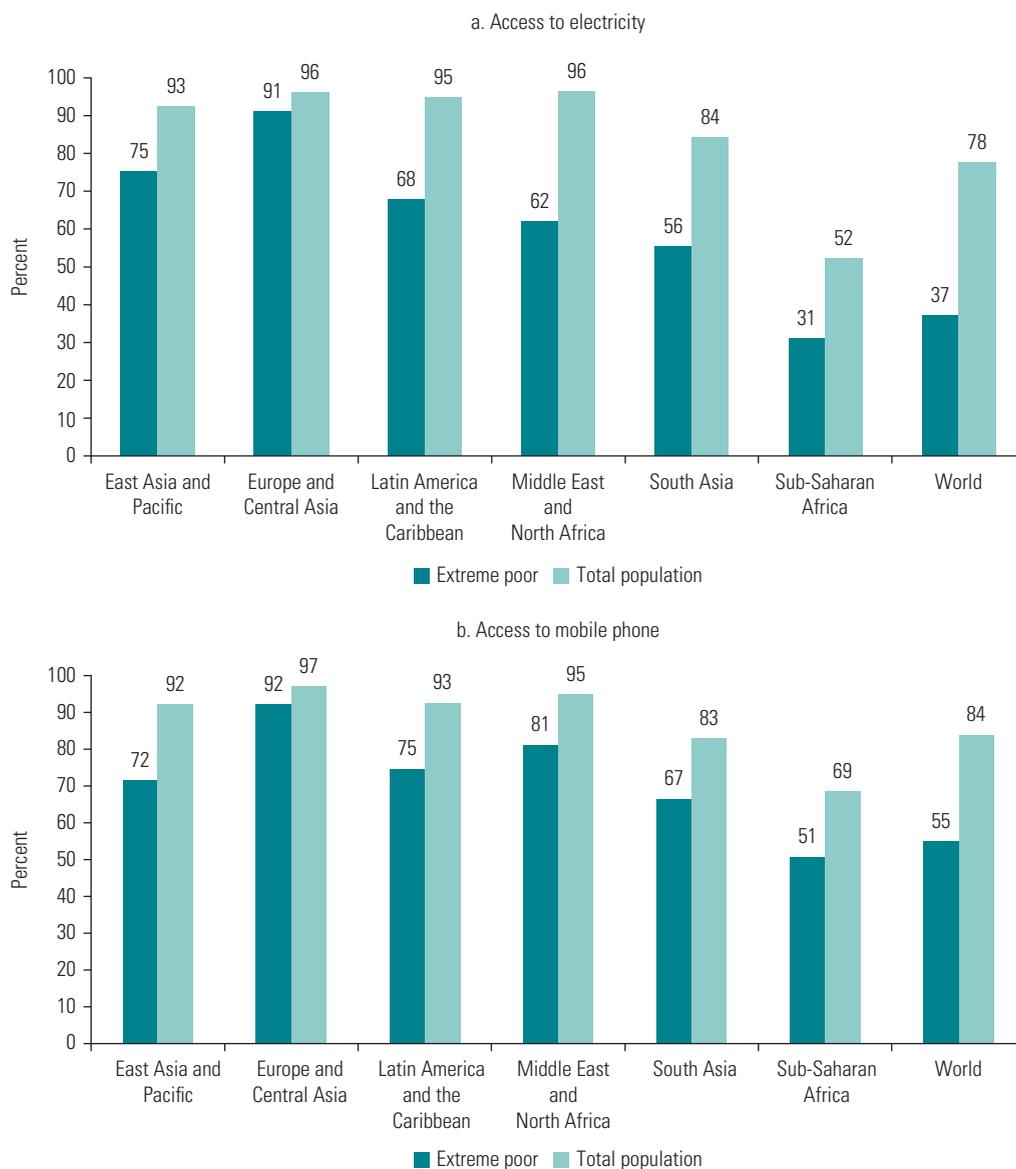


Source: World Bank, Global Monitoring Database (GMD).

Note: The figure shows the share of children among the extreme poor and among the total population in 2019. "Extreme poor" is the population living below the US\$2.15-a-day poverty line. Children are defined as between 0 and 17 years old. See chapter 3 in World Bank (2020b) and box 5.2 in World Bank (2018) for more details on the GMD data.

**FIGURE 1.5**

**The extreme poor were less connected online going into the pandemic**



Source: World Bank, Global Monitoring Database (GMD).

Note: The figure shows the share of the extreme poor and of the total population with access to electricity (panel a) and to mobile phones (panel b) in 2019. “Extreme poor” is the population living below the US\$2.15-a-day poverty line. See chapter 3 in World Bank (2020b) and box 5.2 in World Bank (2018) for more details on the GMD data.

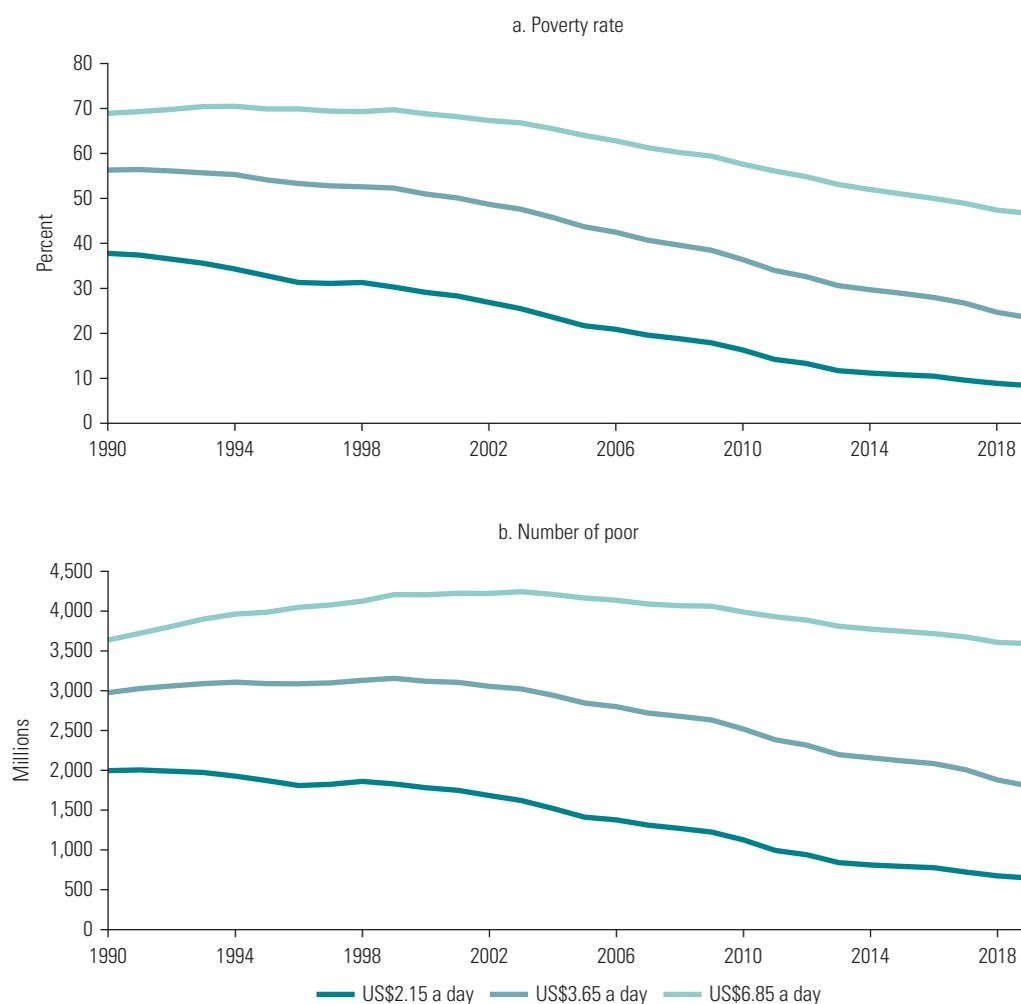
**At higher poverty lines, poverty continued to fall at the same (slow) pace**

As noted in previous editions of *Poverty and Shared Prosperity*, in half of countries extreme poverty is at or below 3 percent, but that does not mean the fight to eradicate poverty is over in these countries (World Bank 2018). In 2018, the World Bank introduced two higher poverty lines typical of standards among lower-middle-income countries (LMICs) and upper-middle-income countries

(UMICs) to help monitor poverty as living standards improve as countries grow. With the adoption of the 2017 PPPs, the two measures reflecting the poverty definitions in LMICs and UMICs were revised to US\$3.65 and US\$6.85, respectively (see box 1.1).<sup>9</sup> These lines are designed to complement, not replace, the US\$2.15 international poverty line. Such poverty measures are becoming progressively more relevant as a larger share of the global population lives in LMICs and UMICs. In 2019, 75 percent of the global population lived in middle-income countries, whereas only 9 percent of the global population lived in low-income countries (see table 1C.3 in online annex 1C).

In 2019, almost a quarter of the global population, 23 percent, lived below the US\$3.65 poverty line and almost a half, 47 percent, lived below the US\$6.85 poverty line (see figure 1.6). For both lines, poverty continued to fall from 2017 to 2019, but the percentage of the world's population living beneath the UMIC line (US\$6.85) is higher than the share published in *Poverty and*

**FIGURE 1.6**  
Global poverty at higher poverty lines continued to fall, slowly



Source: World Bank, Poverty and Inequality Platform, <https://pip.worldbank.org>.

Note: The figure shows the poverty rate (panel a) and number of poor (panel b) at the US\$2.15-a-day, US\$3.65-a-day, and US\$6.85-a-day poverty lines.

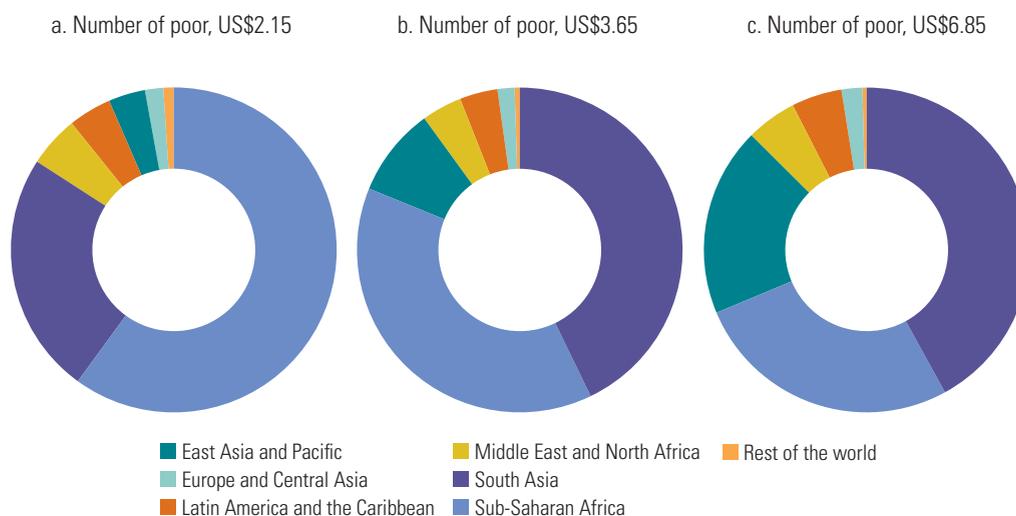
*Shared Prosperity 2020* using the 2011 PPPs. The reasons are that adoption of the 2017 PPPs was accompanied by a real increase in the poverty line typical of UMICs (see box 1.1) and the availability of more recent survey data. For example, recent data for China and Mexico reveal a higher poverty rate in these countries in 2019 relative to what was suggested by extrapolating older data available at the time in *Poverty and Shared Prosperity 2020*. The result is higher poverty rates in the East Asia and Pacific and Latin America and the Caribbean regions (see Castaneda Aguilar et al. 2022a).<sup>10</sup>

The slowdown in poverty reduction observed at the US\$2.15 line has not been observed at higher lines; poverty has continued to decline at a relatively constant rate in recent years. However, the reduction in the poverty rate and number of poor at the US\$6.85 poverty line has been slower than at the US\$3.65 poverty line (figure 1.6). The number of poor at the US\$3.65 poverty line decreased, on average, by 71 million per year between 2014 and 2019, while only by 37 million at the US\$6.85 poverty line.

Most of the extreme poor live in Sub-Saharan Africa, but not at the US\$3.65 and US\$6.85 poverty lines (figure 1.7). In 2019, South Asia had the highest share of the global poor at both the US\$3.65 (43 percent) and US\$6.85 (42 percent) poverty lines. The share of the global poor who live in the East Asia and Pacific region is also significant at the US\$6.85 poverty line (19 percent in 2019). A large number of the global poor at these higher lines live in India (where 595 million people live on less than US\$3.65 a day) and China (where 348 million people live on less than US\$6.85 a day).

For regions that have low extreme poverty rates, trends in progress are more relevant at these higher lines. Twenty-eight percent of the population in Latin America and the Caribbean (180 million people) lives below the US\$6.85 poverty line. The poverty headcount rate at the US\$6.85 poverty line has been declining at 0.5 percentage point per year, on average, since 2014. The East Asia and Pacific region saw a reduction of 3 percentage points per year at the same line and over the same period, with the poverty rate declining from 47 percent to 32 percent between 2014 and 2019. The pace of poverty reduction in that region was even faster at the US\$3.65 poverty line.

**FIGURE 1.7**  
**At the higher poverty lines, the regional distribution of the global poor changes**



Source: World Bank, Poverty and Inequality Platform, <https://pip.worldbank.org>.

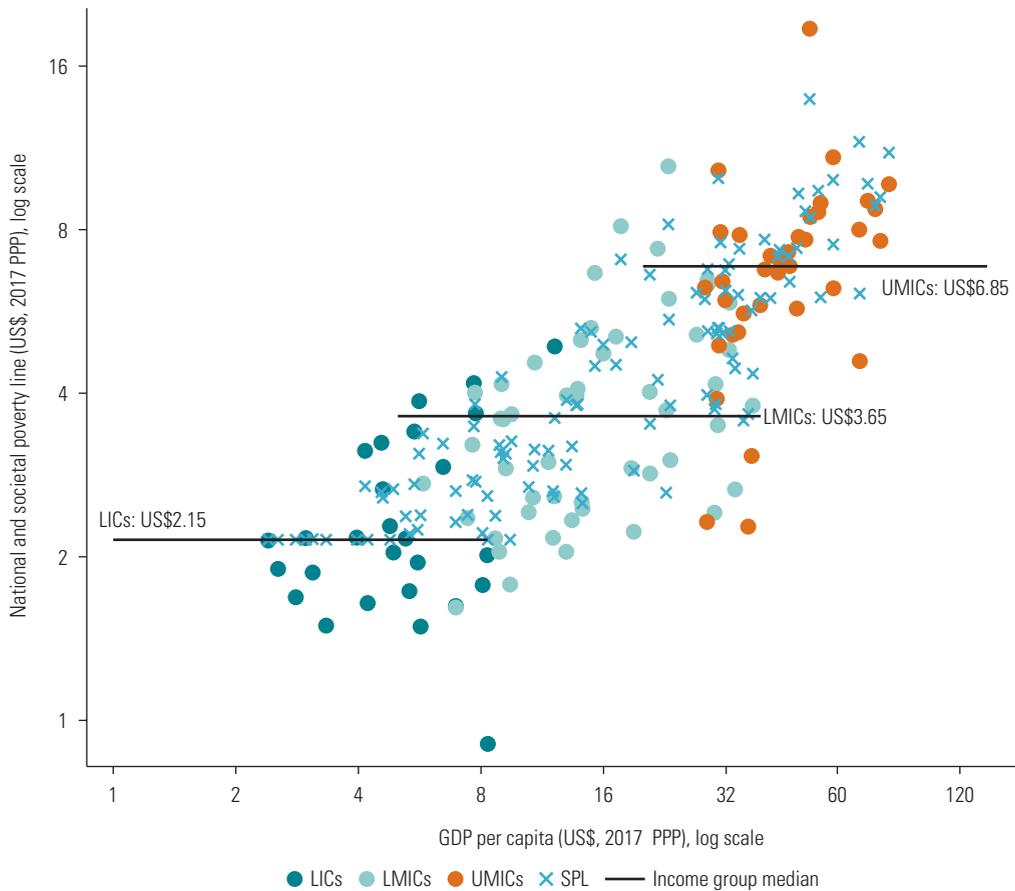
Note: The figure shows the distribution of the global poor at the US\$2.15-a-day (panel a), US\$3.65-a-day (panel b), and US\$6.85-a-day (panel c) poverty lines, by region, in 2019.

In South Asia, the decline in the share of the population living below the US\$3.65 poverty line accelerated after 2016, but 42 percent of the population of South Asia remained in poverty at this value of the line (see table 1D.1, panel b, in online annex 1D).

### The societal poverty rate fell

Analysis of poverty at the higher lines of US\$3.65 and US\$6.85 reveals how the picture of progress and setbacks in poverty reduction changes when incorporating poverty measures meant to monitor poverty in richer countries (see figure 1.8). Yet, together with the international poverty line, these are absolute poverty measures—that is, they use a poverty threshold that remains fixed across countries and within countries over time. In 2018, the World Bank introduced the societal poverty line (SPL), an indicator that combines elements of absolute and relative poverty measures.<sup>11</sup> In contrast to the absolute poverty lines presented in this chapter, the SPL varies across countries and within a country over time, increasing with the level of income as captured

**FIGURE 1.8**  
The cost of basic needs increases as countries grow



Source: Original calculations based on Jolliffe et al. 2022.

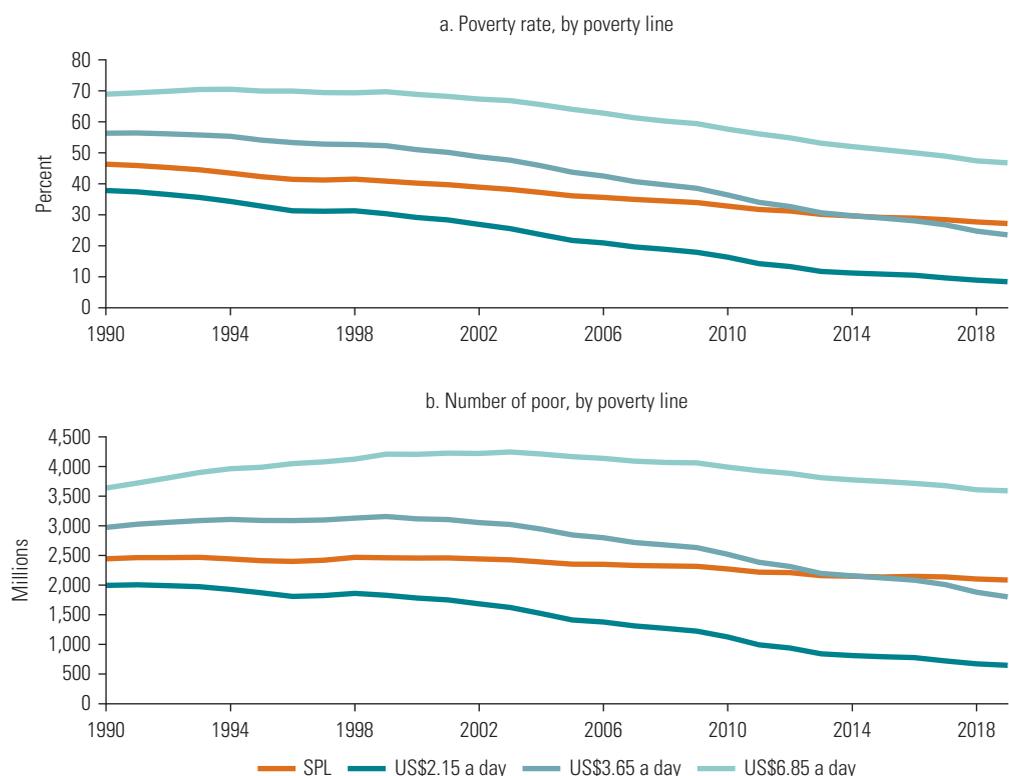
Note: The figure plots national and societal poverty lines against GDP per capita per day. There is one national and one societal poverty line per country; the line closest in time to 2017 is displayed. All variables are expressed in daily per capita terms. GDP = gross domestic product; LICs = low-income countries; LMICs = lower-middle-income countries; PPP = purchasing power parity; SPL = societal poverty line; UMICs = upper-middle-income countries.

by median income or consumption.<sup>12</sup> The relative portion of the SPL can be considered a measure of inequality. For this reason, the SPL is a relevant poverty measure even in high-income countries (HICs).

As with the other measures of poverty in this report, the country-level SPLs have been revised to reflect the introduction of the 2017 PPPs (see box 1.1). This revision led, in turn, to an upward revision of the average global value of the SPL, which for 2019 was US\$8.20 (see table 1E.1, panel a, in online annex 1E).

In 2019, 27 percent of the global population lived below their country's SPL (figure 1.9). This represents an ongoing decline in societal poverty since 2017, underscoring that global progress on poverty reduction before 2020 was not limited to progress on reducing absolute deprivation but also included progress in reducing relative deprivation. Although progress in reducing the global societal poverty rate has continued, figure 1.9 shows that the number of societal poor has largely remained the same over time at about 2 billion people. The geographical distribution of the societal poor is also different from other poverty lines considered in this chapter. According to figure 1.9, panel c, the number of societal poor in 2019 is very similar in South Asia and Sub-Saharan Africa. It also shows that societal poverty captures poverty in HICs under “rest of the world.” In 2019, 167 million people lived in societal poverty in HICs (15.1 percent of the population of HICs).<sup>13</sup> This figure highlights the relevance of the SPL as countries become richer.

**FIGURE 1.9**  
**Progress has been made in reducing the societal poverty rate in recent years**

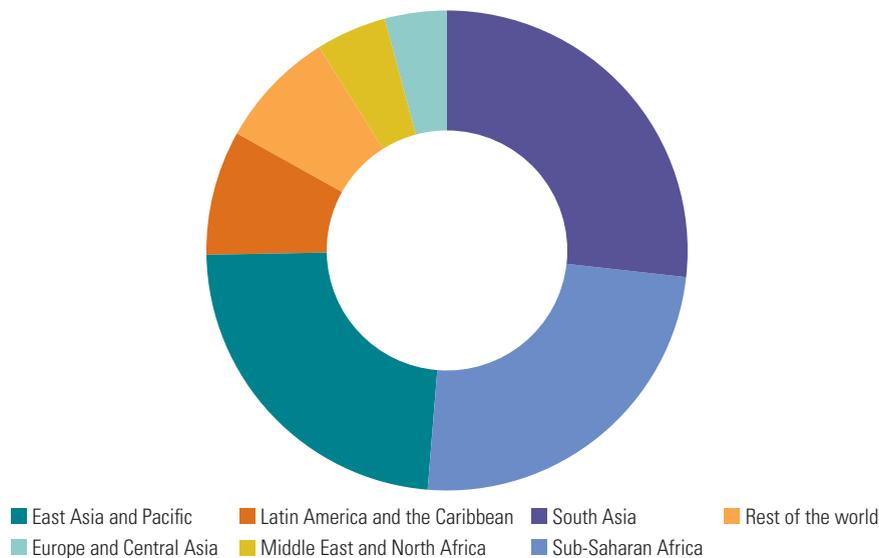


(continued)

**FIGURE 1.9**

**Progress has been made in reducing the societal poverty rate in recent years** *(continued)*

c. Number of societal poor, by region, 2019



Source: World Bank, Poverty and Inequality Platform, <https://pip.worldbank.org>.

Note: Global societal poverty is calculated using a population-weighted average of country-specific societal poverty rates. The treatment of missing countries is identical to the other monetary poverty measures (see online annex 1E for the complete series of yearly lined-up estimates). SPL = societal poverty line.

The levels of poverty in HICs at the three absolute poverty lines of US\$2.15, US\$3.65, and US\$6.85 were 0.6 percent, 0.8 percent, and 1.4 percent, respectively.

New data available for India also allow the construction of societal poverty estimates after 2015 for South Asia for the first time since 2018 (World Bank 2018). The societal poverty headcount rate in 2019 was 30 percent in the region, or more than three times higher than the poverty headcount at the international poverty line. Societal poverty in the region fell from 37 percent to 30 percent between 2014 and 2019. Although this was a more moderate decrease than that for extreme poverty, which decreased from 18 percent to 9 percent over the same period, the region outperformed many other regions where societal poverty rates stagnated or increased during this period: Europe and Central Asia, Latin America and the Caribbean, Middle East and North Africa, and the rest of the world. The East Asia and Pacific and Sub-Saharan Africa regions were the only other two in which the rate of societal poverty fell from 2014 to 2019 (see table 1E.1, panel b, in online annex 1E).

In summary, on the eve of the pandemic in 2019, poverty continued to fall against the global poverty lines of US\$2.15, US\$3.65, and US\$6.85 in almost all regions. However, there was a slowdown in global poverty reduction at the US\$2.15 line and a persistence of high poverty rates at higher values of the poverty line and under the societal poverty definition, even in regions where extreme poverty has largely been eradicated. The chapter now turns to the analysis of global poverty between 2020 and 2022.

## Poverty over the pandemic period: The nowcast

*Poverty and Shared Prosperity 2020*, published just as the economic impacts of the COVID-19 pandemic were emerging, highlighted the three C's that were threatening global progress on poverty: COVID-19, climate, and conflict. Two years after the onset of the pandemic, this report documents more fully the substantial shocks that COVID-19 has imposed, identifies those for whom the shocks have been particularly large or long-lived, and describes how climate and conflict shocks have stalled the recovery.

### The pandemic induced a historic increase in poverty

*Poverty and Shared Prosperity 2020* predicted that the COVID-19 pandemic would be a once-in-a-generation shock, causing the largest increase in global poverty since 1990 and reversing decades of continued global poverty reduction (World Bank 2020a). Based on the additional data collected over the last two years, it is now clearer that the COVID-19 pandemic has indeed triggered the most pronounced setback in the fight against global poverty since 1990, and most likely since World War II.

Box 1.3 details the data and methods used in putting this picture together. During the peak of the crisis (in the second quarter of 2020), the survey work on which poverty numbers rely was halted or conducted by phone rather than by the usual in-person interviews. Although many countries do not have official poverty statistics for 2020, the poverty estimates for 2020 are informed

#### BOX 1.3

##### Predicting changes in poverty with nowcasts

Nowcasting and forecasting poverty are a challenge.<sup>a</sup> Mahler, Castaneda Aguilar, and Newhouse (forthcoming) suggest that, in general, when predicting current or future changes in poverty, growth of the per capita gross domestic product (GDP) performs nearly as well as 1,000 other development indicators combined.<sup>b</sup> This is one reason global poverty nowcasts use per capita GDP growth to estimate the growth in household income.<sup>c</sup> Because such nowcasts assume that the same growth rate in national accounts is experienced by all households in the distribution, they assume distribution neutrality within a country.

##### How nowcasts are estimated in this report

The method just described is used for the nowcasts presented for 2021 and 2022 in keeping with previous editions of *Poverty and Shared Prosperity*. However, unlike in previous editions, the 2020 nowcast in this report incorporates many sources of data now available to allow for an estimate that both takes into account the impact of growth contraction on incomes (as is usually done for nowcasts) and considers that the pandemic had differential impacts on groups within a country. Survey-based estimates are preferred to extrapolations using national accounts given that the former are based on microdata collected by national statistical offices for the purpose of measuring poverty and inequality within a country.

The approach used is set out in full in Mahler, Yonzan, and Lakner (forthcoming). Nowcasting begins with the same country-level data underlying the 2019 global poverty estimate. These data are available for 168 countries in the World Bank's Poverty and Inequality Platform, or PIP (see online annex 1A).<sup>d</sup> The next step is to estimate a household welfare distribution for each country in 2020. As mentioned earlier, survey data—the preferred data source for measuring poverty in a country—are available for only 20 countries in 2020. Thus the nowcast uses a variety of data sources ranked in order of preference as follows:

(continued)

**BOX 1.3**
**Predicting changes in poverty with nowcasts** (*continued*)

1. Household survey data: available for 20 countries.
2. Tabulated 2020 income statistics reported by national statistical offices (NSOs): available for an additional 8 countries.
3. High-frequency phone surveys (HFPS) collected by the World Bank in collaboration with NSOs.<sup>e</sup> These phone surveys provide information on whether a household has lost, gained, or experienced no change in its income since the start of the pandemic (see box 2.4 in chapter 2 for more information on these surveys).<sup>f</sup> After mapping the information from the HFPS to the 2019 welfare distribution, the size of the change in income gains and losses is estimated using sectoral growth rate estimates available from the World Bank's April 2022 Macro Poverty Outlook.<sup>g</sup> This approach is available for 37 countries.
4. For the remaining countries, the nowcast uses a variety of alternative data sources, where available: (1) estimates based on microsimulations from the literature or from World Bank teams; (2) sectoral growth estimates from national accounts; and (3) per capita GDP growth rates applied to all households. For the 3 percent of the global population with no survey data in PIP, the regional average distributions are used (table B1.3.1).

This approach, which includes survey-based estimates of mean growth for many countries and allows for within-country distributional effects, slightly increases overall poverty numbers. Using GDP per capita growth rates to project poverty changes for all countries for 2020 would instead result in an estimated 18 million fewer people living in extreme poverty in 2020. For 2021 and 2022, distribution-neutral per capita GDP-based projections are then used.

**Testing the accuracy of the 2020 nowcasts**

For the 20 countries with survey data, it is possible to compare survey-based estimates with results from two approaches: (1) poverty derived using per capita GDP growth-based, distribution-neutral projections; and (2) for a subset of 13 countries, poverty derived using HFPS. Although the nowcast just discussed above uses survey microdata for the 20 countries, comparison with distribution-neutral and phone survey-based projections would provide some sense of how the poverty rates might be the same as or differ from poverty calculated using actual microdata. It is important to remember that, for countries in the nowcast that rely on methods (1) and (2), survey microdata are not available. Of the 20 available surveys for 2020, 18 are for countries in either Latin America and the Caribbean or Europe and Central Asia, covering 14 percent of the global population. Therefore, the extent to which the findings can be generalized to countries in other regions or at other levels of development is unknown.

**TABLE B1.3.1**
**Method used for nowcasting global poverty in 2020**

Data source (preferred order)	Countries		Population	
	Number	Share (%)	Number (millions)	Share (%)
Household survey data	20	9	1,096	14
Tabulated data from NSOs	8	4	2,146	28
High-frequency phone survey data and sectoral growth rates	37	17	1,027	13
Estimates from literature and World Bank teams	26	12	2,091	27
Sectoral growth rates	56	26	1,035	13
Per capita GDP growth rates	21	10	155	2
Regional average	50	23	211	3
<b>Total</b>	<b>218</b>	<b>100<sup>a</sup></b>	<b>7,762<sup>a</sup></b>	<b>100</b>

Source: Mahler, Yonzan, and Lakner, forthcoming.

Note: GDP = gross domestic product; NSOs = national statistical offices.

a. Any discrepancies in the sum are due to rounding.

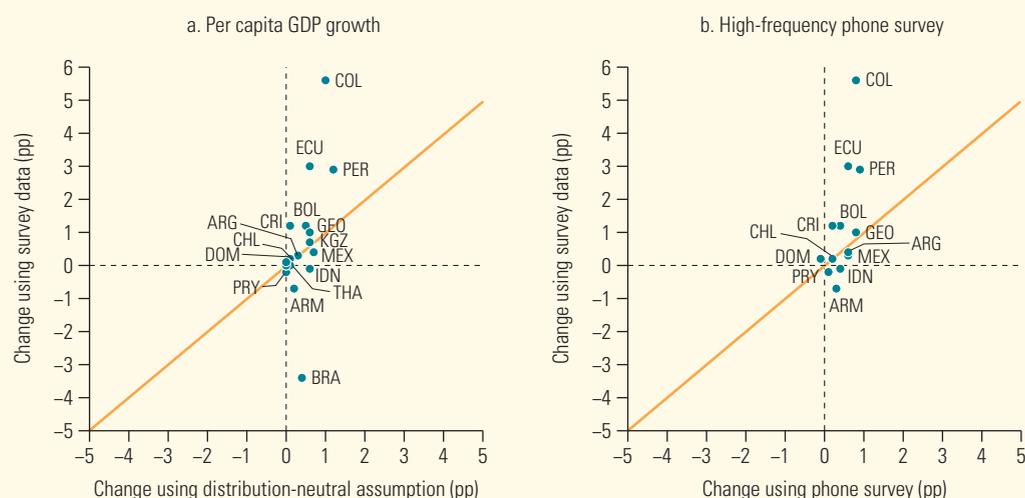
(continued)

**BOX 1.3**

**Predicting changes in poverty with nowcasts (*continued*)**

**FIGURE B1.3.1**

**Cross-checking poverty derived using various methods, change in poverty, 2019–20**



Sources: Original calculations based on Mahler, Yonzan, and Lakner, forthcoming; World Bank, Poverty and Inequality Platform, <https://pip.worldbank.org>.

Note: The figure compares the percentage point change in poverty at the US\$2.15 poverty line in various countries from 2019 to 2020, calculated using actual survey data and the projection based on per capita GDP growth (panel a) or on the high-frequency phone survey (panel b). Countries with no change in poverty using both the survey and distribution-neutral assumption are not labeled in panel a. For a list of country codes, go to <https://www.iso.org/obp/ui/#search/code/>. GDP = gross domestic product; pp = percentage point.

Figure B1.3.1, panel a, shows the correlation of the percentage point change in extreme poverty from 2019 to 2020 between poverty calculated using the actual survey data and poverty derived using per capita GDP growth–based, distribution-neutral projections. For 13 countries, panel b compares the change in poverty using actual survey data with the change in poverty using phone surveys.

Both panels show that, for most countries in the sample, the change in poverty derived from survey microdata is often, but not always, close to estimates derived using per capita GDP growth and phone surveys. Poverty levels derived using survey data are, on average, 0.25 percentage point higher than projections based on per capita GDP growth and 0.72 percentage point higher than projections based on phone surveys. As for changes, the mean absolute change in poverty from 2019 to 2020 in actual surveys is 0.76 percentage point higher than in those using per capita GDP growth and 0.95 percentage point higher than in those using phone surveys. The correlation coefficient of poverty changes is 0.60 between survey data and per capita GDP growth–based projections and 0.62 between survey data and phone survey–based projections. At one extreme, the change in poverty is 4.6 percentage points higher in Colombia in survey data than in the per capita GDP growth–based projection and 4.8 percentage points higher than in the phone survey–based projection. At the other extreme, survey data estimate for Brazil poverty lower by 3.8 percentage points than the per capita GDP growth projection. The lower poverty in Brazil in the survey data is primarily due to the extraordinarily large social protection measures implemented during the pandemic—measures that are discussed later in the report (Lara Ibarra and Campante Cardoso Vale 2022).

The global poverty numbers are largely influenced by the most populous countries—such as China or India—because each individual in the world is weighted equally. Tabulated data published by the National Bureau of Statistics of China is used to inform the nowcast

*(continued)*

**BOX 1.3****Predicting changes in poverty with nowcasts (*continued*)**

for China. Although large, China is home to a small share of the global extreme poor and had a moderate economic shock in 2020; as a result, China does not contribute to the global increase in extreme poverty in 2020. There is a large difference in the 2020 poverty estimates for India depending on the method used. The Consumer Pyramids Household Survey (CPHS) used to monitor poverty in India (see box 1.2) was collected throughout 2020, but the 2020 poverty estimates from these data are yet to be finalized. A per capita GDP growth rate projection implies an increase of 23 million poor people in India in 2020 (at the US\$2.15 extreme poverty line), while initial estimates using the CPHS (implementing a survey-to-survey imputation method - method 1 - in Sinha Roy and van der Weide 2022) suggest an increase of 56 million poor people. This report uses these initial estimates from the CPHS for the purposes of the 2020 global nowcast, putting India under the category of “Estimates from literature and World Bank teams” in table B1.3.1 (for details of how these estimates were calculated see online annex 1G). However, as online annex 1G indicates the final number may be higher or lower than this. The importance of the India numbers in the global poverty estimate for 2020 underscores the uncertainty that still surrounds this estimate. Despite this uncertainty, the finding that 2020 was a historically bad year for progress on poverty reduction remains: even taking the lower bound on the India poverty number, 2020 is likely still the year with the largest increase in poverty since World War II. Although smaller in population, Nigeria and the Democratic Republic of Congo are still relatively large countries and home to a large share of the global extreme poor, however they had relatively mild economic shocks in 2020 and so contribute less to the global increase in extreme poverty, about three million and half a million, respectively.

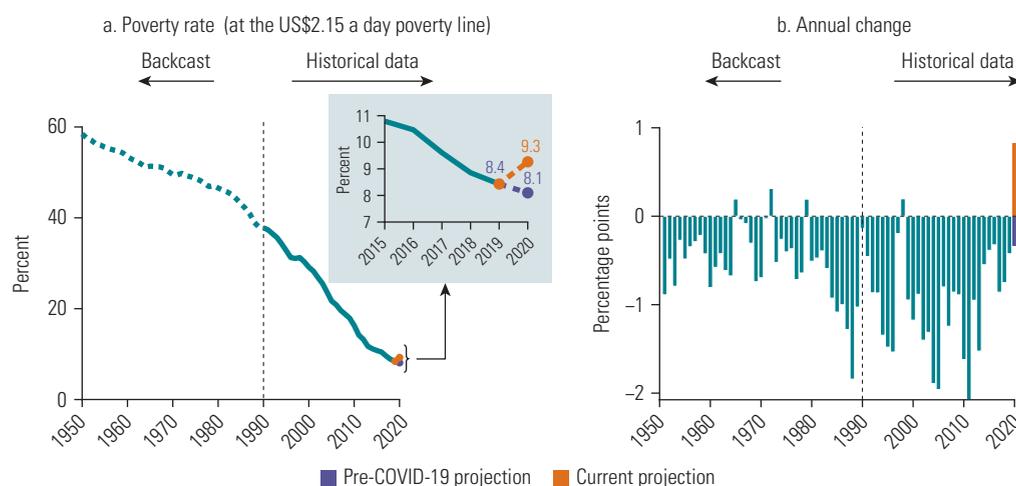
- a. The term *nowcast* refers to global poverty projections beyond 2019—that is, for 2020, 2021, and 2022. For 2020, realized growth rates from the World Bank’s World Development Indicators database (<https://databank.worldbank.org/source/world-development-indicators>) are used. Estimated growth rates for 2021 and the data on projected growth rates in national accounts for 2022 come from the June 2022 *Global Economic Prospects* (World Bank 2022b).
- b. Mahler, Castaneda Aguilar, and Newhouse (forthcoming) evaluate the performance of alternative predictors using past surveys. To maintain the conclusion that per capita GDP growth performs nearly as well as 1,000 other development indicators, this report assumes that this relationship also holds during the current crisis period. In general, it is difficult to evaluate poverty changes during crises because there are often breaks in survey comparability. For example, in those countries conducting a survey in 2020, data collection switched from traditional face-to-face interviews to phone interviews. Questionnaires were also shortened, especially to accommodate the addition of COVID-19–related questions. In Brazil, Colombia, and Peru, among others, the welfare aggregate captured by the survey data includes onetime cash transfers that in other years would not have been included. See Castaneda Aguilar et al. (2022a) for details.
- c. Not all the growth in per capita GDP translates into the growth of mean consumption of households (see Deaton 2005; Prydz, Jolliffe, and Serajuddin 2022; Ravallion 2003). The rate of transfer of growth, also known as the pass-through rate, is 70 percent when consumption is used to measure household welfare and 100 percent when income is used instead (Mahler, Castaneda Aguilar, and Newhouse, forthcoming). For nowcasts and projections, this report adjusts the growth in per capita GDP by a factor of 0.7 when the last household survey of the country uses a consumption aggregate. This method differs from that used in *Poverty and Shared Prosperity 2020*, which used a pass-through rate of 0.85 for all countries, regardless of the welfare measure used.
- d. Although survey microdata are available for 169 countries in PIP, growth data are only available until 2014 for República Bolivariana de Venezuela. Thus regional and global poverty estimates after 2014 are calculated by assigning the population-weighted average of the Latin America and the Caribbean region to República Bolivariana de Venezuela, following the methodology used for countries missing data (see online annex 1A).
- e. These surveys, as their name indicates, are conducted over the phone and are therefore less comprehensive than traditional household surveys. Yet, because of the mode of data collection, they can be conducted even during strict quarantines and government shutdowns. In many countries, phone surveys are some of the only national surveys available since 2020. As of 2022, such surveys had been conducted in 72 countries across all developing regions. More than 100 indicators have been harmonized across countries from these surveys.
- f. Twenty-four countries report an income change measure. An additional 13 countries that do not record change in income report whether households experienced a loss in consumption.
- g. World Bank, Macro Poverty Outlook, [https://www.worldbank.org/en/publication/macro-poverty-outlook#:~:text=The%20Macro%20Poverty%20Outlook%20\(MPO,and%20the%20International%20Monetary%20Fund.](https://www.worldbank.org/en/publication/macro-poverty-outlook#:~:text=The%20Macro%20Poverty%20Outlook%20(MPO,and%20the%20International%20Monetary%20Fund.) See Mahler, Yonzan, and Lakner (forthcoming) for technical details.

by surveys for a large number of countries and territories and so constitute a much more detailed analysis of the impact of COVID-19 on poverty than has been presented to date using traditional nowcasting methods. That said, more uncertainty surrounds these numbers than those presented for poverty trends until 2019. Results have been triangulated where possible and robustness checks carried out for the main messages, as is discussed in box 1.3 and described in much more detail in Mahler, Yonzan, and Lakner (forthcoming), but this uncertainty should be kept in mind. The numbers will continue to be updated as more information becomes available.

According to the nowcast of global poverty, 71 million more people were likely living in extreme poverty in 2020 than in 2019—a 11 percent increase. This increase in global poverty, an increase from 8.4 to 9.3 percent, is the largest increase since 1990 and likely the largest increase since World War II (see figure 1.10).<sup>14</sup> The last increase in the global headcount poverty rate occurred during the Asian financial crisis, when between 1997 and 1998 the global poverty headcount rate at the international poverty line increased by 0.2 percentage point, equivalent to 37 million more poor people. The magnitude of the COVID-19–induced increase is more than four times larger than the Asian financial crisis–induced increase after controlling for differences in global population.

To isolate the impact of the pandemic in 2020, figure 1.10 compares the nowcast with a counterfactual series estimated using pre-pandemic GDP growth forecasts for 2020. This series shows where the nowcasted series would have been without the crisis. The net effect is the difference between where the world is (the COVID-19 nowcast or “Current projection”) and where the world would have been (“Pre-COVID-19 projection”).<sup>15</sup> Poverty had been projected to decline in 2020, prior to the pandemic. Taking this projection into account reveals that poverty was 1.2 percentage points higher than projections going into 2020 (extreme poverty had been expected to fall by 4 percent), which translates to 90 million additional poor people—the net impact of the pandemic.

**FIGURE 1.10**  
**The COVID-19 pandemic was a historic shock to global poverty**



Sources: Original calculations based on Mahler, Yonzan, and Lakner, forthcoming; World Bank, Poverty and Inequality Platform, <https://pip.worldbank.org>; World Bank 2022b.

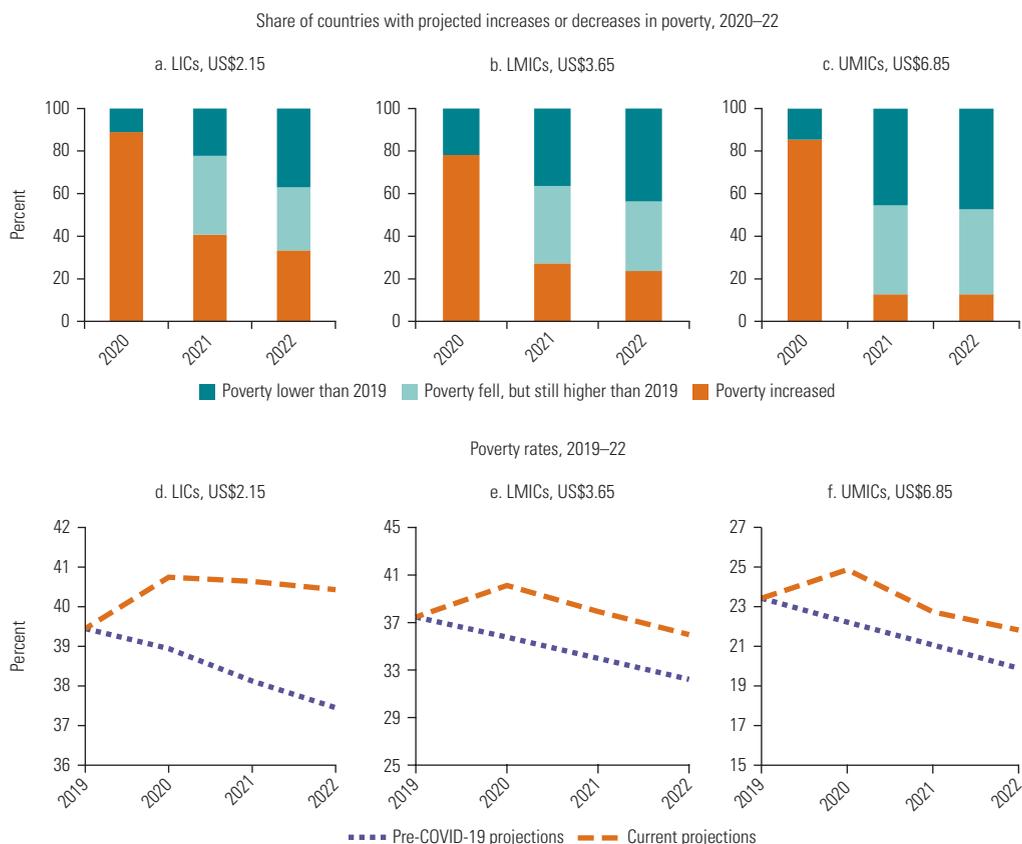
Note: Panel a shows the global poverty headcount rate at the US\$2.15-a-day poverty line for 1950 to 2020. “Historical data” for the period 1990–2019 are from the Poverty and Inequality Platform. “Backcast” estimates are extrapolated backward from the 1990 line-up using growth in national accounts. National accounts data before 1990 are from the World Development Indicators, the World Economic Outlook, and Bolt and van Zanden 2020. “Current projection” uses the nowcast methodology outlined in this section and a variety of data sources to project the latest 2019 lined-up estimate to 2020. “Pre-COVID-19 projection” extrapolates the 2019 line-up to 2020 using per capita GDP growth forecasts from the January 2020 *Global Economic Prospects* database. Panel b shows the annual percentage point change in the global poverty headcount rate.

Unlike other recent crises, the pandemic shock was truly global in its impact, increasing poverty in most low- and middle-income countries.

The majority of the additional poor people at the US\$2.15 poverty line live in South Asia (see table 1F.1 in online annex 1F for a regional breakdown of the projection). Sub-Saharan Africa and the East Asia and Pacific region follow. As discussed in more detail in box 1.3, different data and assumptions for India alter the number of additional poor in 2020. However, under all assumptions the increase in global poverty was concentrated in South Asia, which is consistent with the observed gross domestic product (GDP) per capita shock. The contraction in GDP per capita in 2020 for the three countries with the highest share of extreme poor was -7.5 percent for India, -4.3 percent for Nigeria, and -1.4 percent for the Democratic Republic of Congo.<sup>16</sup> At the higher poverty lines, South Asia still contributes the largest share to the global numbers, but the increase in poverty in the East Asia and Pacific region becomes much more substantial and a higher contribution to the global total (table 1F.1 in online annex 1F).

Figure 1.11 shows how country income groups fared against the poverty line relevant to their income category. Panels a, b, and c of figure 1.11 show the share of countries that experienced

**FIGURE 1.11**  
**Poverty increased across income groups in 2020 and displayed an uneven recovery in 2021–22**



Sources: Original calculations based on Mahler, Yonzan, and Lakner, forthcoming; World Bank, Poverty and Inequality Platform, <https://pip.worldbank.org>; World Bank 2022b.

Note: Panels a–c show the share of countries where the poverty rate has decreased or increased relative to the prior year and relative to 2019, by income group. Countries where poverty increased include countries where poverty did not change. Panels d–f show the poverty rate between 2019 and 2022 at the income group–relevant poverty line. See also figure 1.10. LICs = low-income countries; LMICs = lower-middle-income countries; UMICs = upper-middle-income country.

increases or decreases in poverty, and panels d, e, and f show the projected poverty rates (as well as the prepandemic projection). In 2020, nearly all low-income countries (LICs) and LMICs saw increases in poverty. The size of the increase was particularly large in LMICs, where the poverty rate at the US\$3.65 poverty line increased by 2.7 percentage points between 2019 and 2020. Poverty also increased in most UMICs. However, the substantial fiscal support received by households in large UMICs such as Brazil and South Africa mitigated the impact of the crisis on poverty and even reduced poverty in some cases (see chapter 4 for a fuller discussion).

## A slow and uneven recovery in 2021

Indonesia is the only country for which survey microdata are available for 2021. For the remaining countries in 2021, the nowcast starts with the 2020 distribution presented in the previous section and uses growth forecasts available from the World Bank's June 2022 *Global Economic Prospects* (World Bank 2022b) to estimate poverty using the standard method for nowcasting described in box 1.3 (also see World Bank 2018, 2020a). In this method, all households in a country are assumed to experience the same income growth (predicted by the per capita GDP growth for that country). As survey data for 2021 becomes available these estimates will be updated. The nowcast of global poverty for 2021 shows that the global economic recovery in 2021 allowed for some reduction in global poverty (figure 1.12). The global poverty headcount rate fell from 9.3 percent in 2020 to 8.8 percent in 2021. However, the recovery was limited.

The pace of poverty reduction for 2021 has reverted to levels similar to the pre-COVID-19 projections (see figure 1.12). Returning to pre-COVID-19 rates of poverty reduction means that little progress was made on reversing the impact of the devastating shock to global poverty in 2020. As a result, nowcasts suggest that there were still 78 million more poor in 2021 than anticipated prior to COVID-19 (see table 1F.1 in online annex 1F for a regional breakdown). At the US\$3.65 poverty line, poverty is set to decline by 1 percentage point from 2020 to 2021, which is progress but still leaves 147 million more people living on less than US\$3.65 a day in 2021 than anticipated. The poverty trend looks similar at the US\$6.85 poverty line. The poverty rate decreased by about 1 percentage point between 2020 and 2021, but at the end of 2021 there were 140 million more poor than anticipated (figure 1.12).

Recovery has also been highly uneven. Figure 1.11 shows the change in poverty by country income group. Recovery in 2021 was very uneven in LICs. Of 27 countries, poverty increased in almost as many countries (11) as it fell (16), and few countries (6) saw poverty return to 2019 levels. As a result, the aggregate poverty rate stayed almost constant. Recovery in LMICs was stronger, with nearly three-quarters of LMICs recording poverty reductions, but recovery was not strong enough to reverse increases in 2020 in about half of these countries. A higher share of UMICs registered a reduction in poverty in 2021 (87 percent), but again in only half of them was it large enough to offset the increase experienced in the previous year. Chapter 2 discusses in more detail how the pandemic increased global inequality between countries, but this finding already points to diverging fortunes.

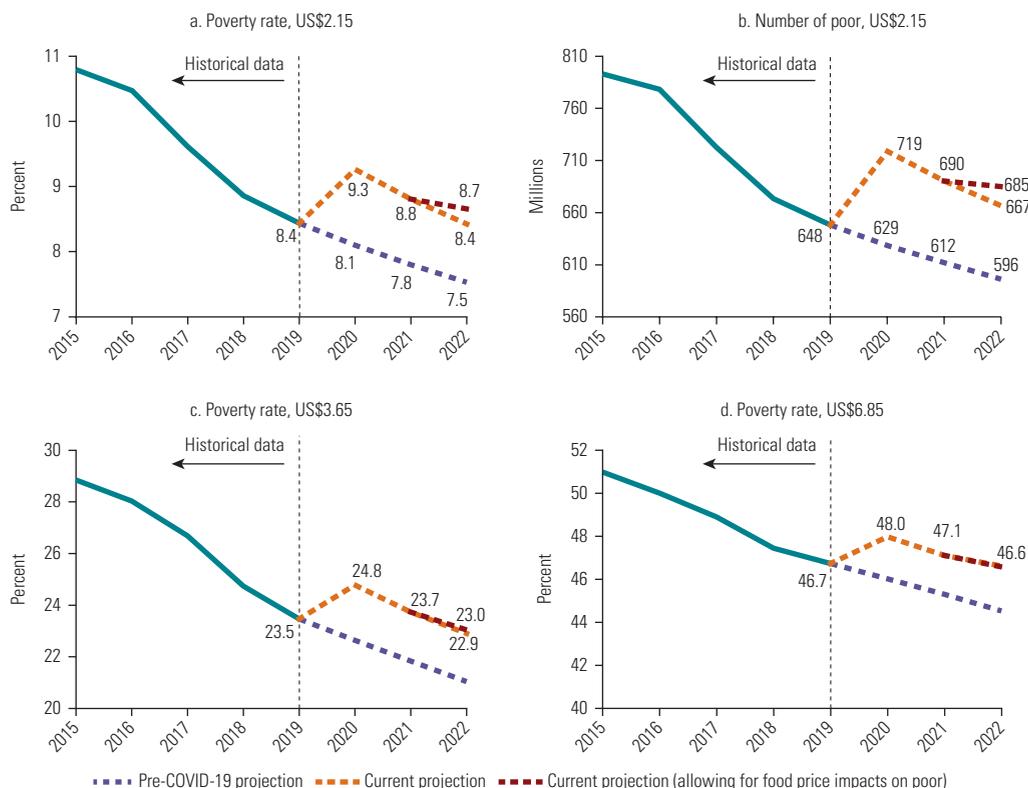
## Recovery stalled in 2022

Nowcasts suggest this weak recovery will effectively stall in 2022, in part because of the war in Ukraine, which exacerbated high food and energy prices, compounded by a series of climate shocks in the world's largest food producers. Seventy million more people are expected to be living in extreme poverty in 2022 compared with prepandemic projections for 2022 (figure 1.12). Poverty at the US\$6.85 poverty line shows an even smaller reduction between 2021 and 2022, declining by just 0.5 percentage point, or half the reduction registered between 2020 and 2021.

Lower growth rates have reduced projected poverty reduction.<sup>17</sup> In the short run, high food price inflation can have particularly detrimental impacts on poorer households, which spend

**FIGURE 1.12**

**Poverty reduction stalled at all poverty lines in 2022**



Sources: Original calculations based on Mahler, Yonzan, and Lakner, forthcoming; World Bank, Poverty and Inequality Platform, <https://pip.worldbank.org>; World Bank 2022b.

Note: The figure shows the nowcast for the poverty headcount rate (panels a, c, and d) at the three poverty lines—US\$2.15, US\$3.65, and US\$6.85 a day—and for the number of poor at the US\$2.15-a-day poverty line (panel b). For 2022, nowcasts are reported for the “Current projection” and for the “Current projection (allowing for food price impacts on poor).”

a larger share of their income on food. In the long run, households can partially adapt to higher prices by changing their consumption patterns to lessen the impact (Friedman and Levinsohn 2002). In addition, higher food prices can be a source of income growth for households producing food on their own farms. For poor households working in agriculture as wage labor, wages can also adjust to the situation (Headey 2018). As a result, analyses and poverty assessments have found higher food prices to be a driver of poverty reduction in the long run. Box 1.4 provides a fuller discussion of this evidence.

However, in the short run the impact of food prices on poverty can be large, particularly for urban poor households who spend a lot of their income on food and who do not benefit from the potential to increase their income. To capture the short-run effect of rising food price inflation on poverty in 2022, it is important to relax the assumption that all households in a country are equally affected by rising prices. To take this factor into account, nowcasts include a pessimistic (or downside) scenario that accounts for the differential short-run impacts of food price inflation on poorer households relative to richer ones. This scenario is based on the results of a simulation of the current food price inflation in 53 countries by Artuc et al. (2022). Their analysis considers the share of food in total spending for households across the income distribution, as well as some immediate income effects as a result of changes in prices (but no changes in production or rural

**BOX 1.4****The impacts of rising global food and energy prices on poverty**

Food prices rose by 5 percentage points more than core inflation (estimated as the median of country inflation data) in the two years prior to March 2022 (Ha, Kose, and Ohnsorge 2021). Energy prices rose by 11 percentage points more than core inflation in this period, but they are expected to rise 50 percent in 2022 (Ha, Kose, and Ohnsorge 2021; World Bank 2022a). The increases observed so far are very similar to those during the 2008 food price crisis. The prices of agricultural inputs such as fertilizer also rose dramatically in both periods, increasing 266 percent in the two years prior to June 2008 and 217 percent in the two years prior to March 2022. In 2022, prices of wheat and corn spiked, but rice prices remained relatively unaffected. By contrast, rice prices doubled in 2007, alongside wheat and corn price increases.

**Immediate and long-run impacts of higher food prices**

The immediate impacts of rising food prices are likely to hit the poor the hardest. However, simulations that focus only on the immediate impacts of higher prices are unlikely to capture the full nature of the price impacts in the long run because they do not consider several factors that may dampen the immediate impact of the food price shock (Minot and Dewina 2015). Consumers seek substitutes for the foods whose relative prices are increasing (Andreyeva, Long, and Brownell 2010; Friedman and Levinsohn 2002), food producers benefit from higher prices in their next sale, wages adjust, and agricultural investment and production increase (Ivanic and Martin 2014; Jacoby 2016; Van Campenhout, Pauw, and Minot 2018). These changes occur within a matter of months, reducing any immediate impact quite quickly.

Analysis of 300 different poverty episodes drawn from the World Bank's global poverty data finds that increases in international food prices are correlated with reductions in poverty over the next one to five years (Headey 2018). The reductions are attributed to the agricultural supply response and, to a lesser extent, to the wage response to higher food prices.

**A look back at periods of high food prices and effects on poverty**

The remainder of this box looks at poverty assessments that considered the drivers of poverty trends during the periods of high food prices from 2008 to 2011.

In Uganda, Simler (2010) predicted an increase in national poverty of 2.6 percentage points due to higher global food prices in 2008. However, official poverty estimates pointed to an annual 1.6 percentage point reduction in poverty from 2006 to 2013. Good rainfall and prices accounted for two-thirds of the growth in crop income of the bottom 40 percent from 2006 to 2012 (World Bank 2016).

Ivanic and Martin (2008) simulated the short-run impacts of increasing global food prices between 2005 and 2007 in several countries, including Cambodia, and projected a 1.5 percentage point increase in national poverty rates in Cambodia. However, the pace of poverty reduction increased from 2007 to 2009 because of increasing rice prices, which particularly benefited rural poverty reduction (World Bank 2013b). Increases in farmers' incomes as a result of higher goods prices, better rural wages, and higher income from nonfarm self-employment were drivers of poverty reduction in rural areas.

In Bangladesh, the food price spike in 2008 resulted in real wage growth for agricultural workers, reversing the short-term impact of higher prices for rural households (World Bank 2013a). Similarly, Jacoby (2016) found that agricultural wages rose faster in rural Indian districts growing a higher share of crops that experienced larger relative price increases and that the rise in agricultural wages had significant spillover effects on nonagricultural wages as well.

In Ethiopia, poverty fell fastest when and where agricultural growth was strongest, and a driver of agricultural growth was higher food prices (World Bank 2015). However, high food prices hurt

*(continued)*

**BOX 1.4****The impacts of rising global food and energy prices on poverty** *(continued)*

agricultural households in the poorest decile in Ethiopia, who produce very little, and unskilled wage workers in urban areas for the four to five months that wages took to adjust to food price increases (Headey et al. 2012). A review in Brazil also found that, although the market income effects of food price increases were positive for the rural poor, they were not positive for urban populations (Ferreira et al. 2013).

Overall, official estimates show reductions in poverty and inequality arising in the long run from high food prices. However, some vulnerable groups—urban households and marginal agricultural households—do not necessarily stand to benefit. This finding points to the need to provide households with quick, time-bound, targeted support immediately after a price crisis. It also points to the need to remove constraints to agricultural investments that will enable realization of the positive impacts of high food prices on production.

wage effects). Artuc and his colleagues do not include any government response to the increase in food prices.

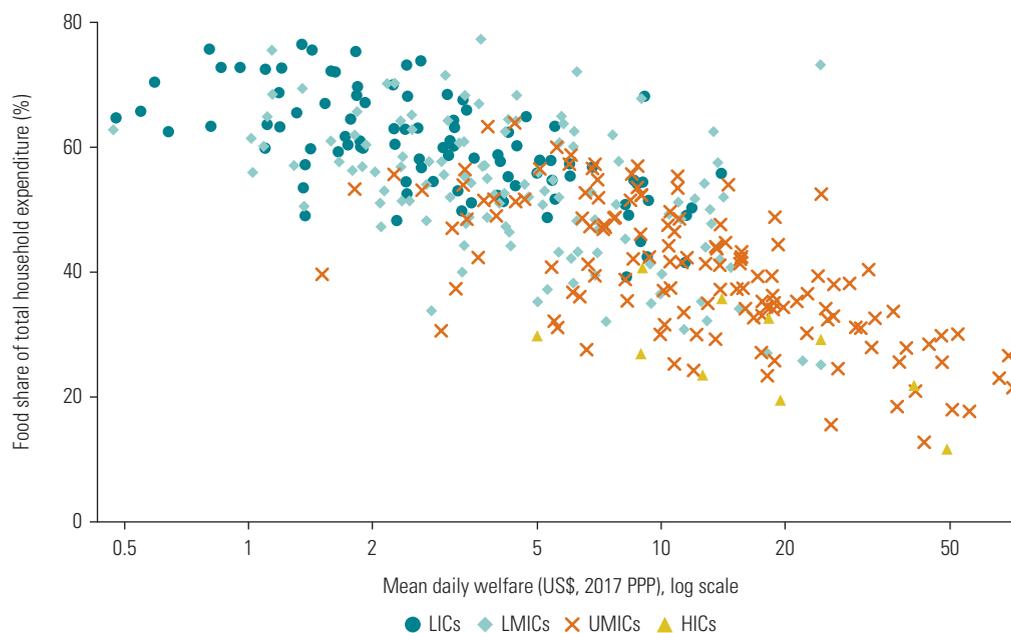
The authors estimate that the bottom 40 percent of each country faces, on average, 3 percentage point higher inflation than the top 60 percent. Across 36 countries in Sub-Saharan Africa, this equates to food price inflation that is roughly twice as high as nonfood price inflation. In the downside scenario, the number of extreme poor increases by over 18 million on top of the estimated 667 million poor in 2022 (figure 1.12, panel b). However, as noted, this impact could be a short-run downside one.

Governments can mitigate such impacts through social protection policies. However, somewhat different from the previous periods of high food price inflation, and as part 2 discusses, governments' finances have been depleted by the various fiscal measures enacted through the COVID-19 crisis. For economies still reeling from the pandemic, these inflationary pressures could not have come at a worse time.

Inflation forecasts are subject to great uncertainty, and it is possible that food and energy prices will rise further. Figure 1.13 shows how the share of food in total consumption changes across the income distribution to highlight why further increases in food prices, beyond what was anticipated, would increase the pressures on poor households in the short run. This analysis uses data on food consumption shares and mean consumption by quintile from household surveys from 71 countries across the income spectrum. The food consumption share is then regressed on log consumption to predict the share for any given consumption level.<sup>18</sup> This analysis based on Mahler et al. (2022) reveals that people living in extreme poverty spend about two-thirds of their resources on food.<sup>19</sup> As online annex 1C reports, 81 percent of people living in extreme poverty live in rural areas, and so for some of these households further increases in food prices may also increase incomes, thereby reducing negative impacts. However, there is significant regional variation in the share of the extreme poor who live in rural areas, ranging from 43 percent in Latin America and the Caribbean to 87 percent in South Asia. Regions in which a large share of poor people live in urban areas (such as Latin America and the Caribbean and Europe and Central Asia) are likely to be more adversely affected by rising food prices.

**FIGURE 1.13**

**Poorer households spend more on food**



Source: Original calculations based on Mahler et al. 2022.

Note: The figure shows the relationship between food share and average logged consumption for each consumption quintile using household surveys for 71 countries. Each observation is a consumption quintile for a country. Estimates for India are reported by rural and urban quintiles. “Mean daily welfare” captures the average daily income of each country quintile expressed in 2017 PPP US\$. HICs = high-income countries; LICs = low-income countries; LMICs = lower-middle-income countries; PPP = purchasing power parity; UMICs = upper-middle-income countries.

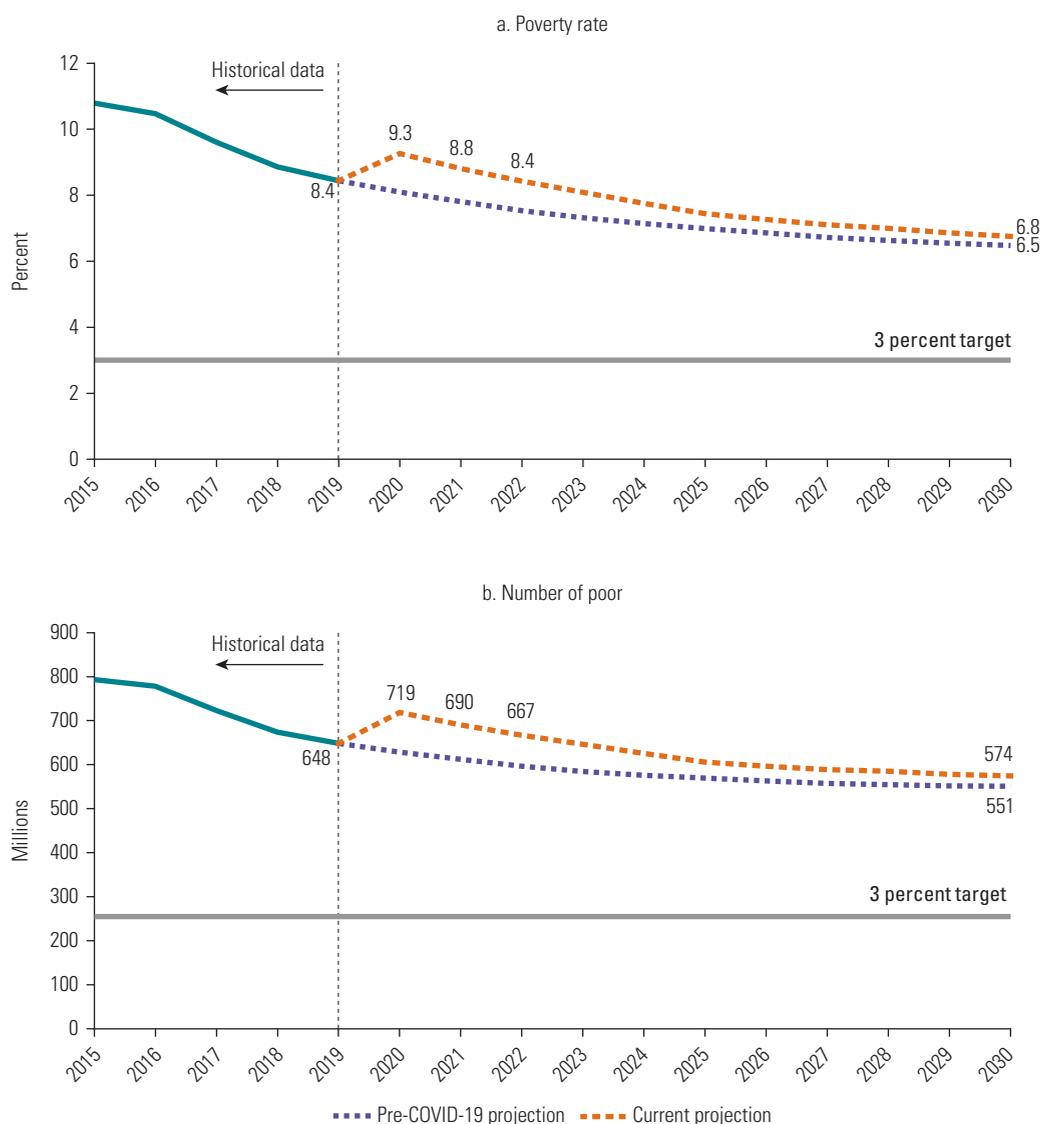
## Implications for reaching the 3 percent global poverty target by 2030

The United Nations’ Sustainable Development Goals call for ending extreme poverty by 2030, and the World Bank’s own goal is to reduce global poverty to at most 3 percent by the end of this decade. These goals were set following the successful achievement of the Millennium Development Goal to halve global poverty between 2000 and 2015. The 3 percent target was at the time considered an aspirational target for the global community. The first section of this chapter, however, points to slowing poverty reduction between 2014 and 2019 as poverty became increasingly concentrated in fewer countries with slower growth rates than those countries that drove progress prior to 2014. This and other setbacks, as well as the slow recovery nowcasted for 2020–22, are already raising concerns about whether the world is on track to meet the 2030 target. Indeed, previous editions of this report have highlighted that the target is increasingly challenging to meet, and it will require higher and higher growth rates or reductions in inequality.

World Bank growth forecasts are only available until 2024 (World Bank 2022b), so the projections in figure 1.14 assume that each country grows at its average annual historical per capita GDP growth rate for the period 2025–30. Closely following World Bank (2020a), historical average annual growth rates are derived for each country for the 10-year period (2010–19) before the pandemic. Although growth rates are available for the pandemic period, it is safe to assume that the growth shocks observed during the pandemic are rare enough that they most likely will

**FIGURE 1.14**

**Progress in poverty reduction has been altered in lasting ways**



Sources: Original calculations based on Mahler, Yonzan, and Lakner, forthcoming; World Bank, Poverty and Inequality Platform, <https://pip.worldbank.org>; World Bank 2022b.

Note: Two growth scenarios are considered: the “Current projection” uses growth rates from the June 2022 *Global Economic Prospects* (GEP) database to project poverty up to 2024. The “Pre-COVID-19 projection” uses the January 2020 GEP growth rate to project poverty to 2022. Both scenarios use the country-level average annual historical (2010–19) growth rate to project poverty in the remaining years. “3 percent target” is based on the estimated number of poor in 2030 (255 million).

not recur during the period ending in 2030. Projections are also presented in figure 1.14 for a pre-COVID-19 scenario to illustrate the setback caused by the pandemic.<sup>20</sup>

Figure 1.14 shows that, even before the pandemic, the world was not set to achieve the World Bank’s goal of reaching 3 percent global extreme poverty by 2030, confirming findings in *Poverty and Shared Prosperity 2020* (World Bank 2020a). Under the prepandemic scenario, the global extreme poverty rate would have been 6.5 percent in 2030, equivalent to 551 million poor.<sup>21</sup>

Incorporating the most recent growth scenario, which includes the effect of the pandemic and of the compounding shocks of inflation and conflict for 2022, the global poverty rate for 2030 is projected to be 7 percent, equivalent to 574 million people still living on less than US\$2.15 per person per day in 2030.

Under pre-COVID-19 projections, a similar global poverty headcount rate of 7 percent would have been achieved in 2026. In other words, the pandemic, conflict, and inflation are likely responsible for a four-year delay in the progress toward global poverty reduction. A three-year delay was anticipated in the previous edition of this report (World Bank 2020a), highlighting how the still-evolving nature of the current crises could continue pushing the 3 percent goal further into the future. Growth projections from long-run growth models indicate that, even before COVID-19, projected growth was not fast enough to achieve the target of ending poverty in this lifetime.<sup>22</sup> Thus that point at which the world meets the 3 percent goal is now further in the future.

These projections mask substantial differences in projections between regions. As figure 1.3 foretells, extreme poverty is projected to become increasingly concentrated in Sub-Saharan Africa. Other regions will likely reach the 2030 target of less than 3 percent extreme poverty by 2030, but poverty is projected to remain intractably above target in Sub-Saharan Africa. The challenge facing this region is well illustrated by considering the income growth that would have to be achieved to reach the 2030 target. Findings from simulations show that all countries would need to grow 9 percent a year beginning in 2023 to achieve the 3 percent goal by 2030. For Sub-Saharan Africa, which had an average per capita GDP growth rate of 1.2 percent in the decade preceding the pandemic, this would mean achieving growth rates about eight times higher than historical rates between 2010 and 2019. These projections underscore the key findings and messages of the recent trends presented in this chapter: there is an urgent need to correct course.

## Notes

1. The first United Nations Sustainable Development Goal calls for a global effort to “end poverty in all its forms everywhere” (United Nations 2017). The World Bank set a target of reducing global poverty to below 3 percent by 2030. Box 1.1 in *Poverty and Shared Prosperity 2018* (World Bank 2018) describes how the World Bank’s corporate goals align with the Sustainable Development Goals.
2. This reduction in pace is not just because the percentage point changes are smaller—percentage point changes are smaller at lower rates (Ravallion 2003)—but also because the average annual percentage change in poverty fell from 8 percent to 5 percent.
3. Following the coverage rule of the Poverty and Inequality Platform (PIP), regional estimates for South Asia were only reported until 2014 in *Poverty and Shared Prosperity 2020* (in that report, see box 1.2; in this report see table 1C.4 in online annex 1C).
4. As discussed in online annex 1B, the World Bank will continue to make the 2011 PPPs-based estimates available to users via PIP. The objective is to ensure transparency and replicability and to address the recommendation of the Atkinson Commission on Global Poverty that the World Bank continue to report poverty estimates on the basis of the 2011 PPPs until 2030.
5. Data coverage for 2017 refers to the data available at the time of writing *Poverty and Shared Prosperity 2020*. PIP’s data coverage for 2017 for Sub-Saharan Africa is currently 87 percent.
6. For example, several countries collected welfare data via phone interviews, replacing or complementing traditional in-person interviews. Moreover, in several countries the welfare aggregate used to measure poverty has been adapted to better capture the full extent of the COVID-19 shock—see Castaneda Aguilar et al. (2022a) for further details.
7. Because of this limited data availability and the incomparability in household welfare measures collected in 2020 using previous surveys, global and regional poverty estimates for 2020 are not reported in PIP, even though data coverage met PIP’s coverage rule (see online annex 1A). Poverty rates for 2020 are presented as nowcasts instead (see the section on nowcasts later in this chapter).

8. The number of available surveys for 2020 may increase in the coming years. However, in 2020 and at the time of writing the 2020 edition of this report, 30 household surveys for 2018 were already available. Country-level lined-up poverty estimates are available in each reporting year between 1990 and 2019 (see online annex 1A).
9. The change in PPPs largely explains the changes in the lower lines, while the change in the UMIC line is partly due to PPP changes and partly due to upward revisions in national poverty lines in real terms (Jolliffe et al. 2022). This result seems intuitive because poverty in UMICs is more likely to reflect the concept of relative poverty, which changes over time with changes in income and consumption patterns.
10. One way to quantify this revision is to compare the lined-up poverty estimate for 2019 from the global poverty data vintage used in *Poverty and Shared Prosperity 2020* with the lined-up estimate for 2019 used in this report. Because the former was expressed in 2011 PPPs, the estimates are calculated using the 2011 PPPs legacy series. The latest data drive an upward revision of 1.7 percentage points in the 2019 lined-up estimate for China and of 3.2 percentage points for Mexico.
11. See chapter 3 in *Poverty and Shared Prosperity 2018* (World Bank 2018) and box 1.1 in *Poverty and Shared Prosperity 2020* (World Bank 2020a).
12. Figure 1.8 captures the relationship between the SPL and higher living standards measured with GDP per capita. GDP per capita is highly correlated with measures of median household income or consumption used to derive the SPL—see figure 3.3 in World Bank (2018).
13. This chapter follows the PIP regional classification, which is different from the regional classifications used by the World Bank. Some economies, mostly high-income economies, are excluded from the geographical regions and are included as a separate group referred to as “rest of the world.” See the PIP regional classification available here: <https://worldbank.github.io/PIP-Methodology/lineupestimates.html#regionsandcountries>.
14. To allow for a historical comparison, household welfare vectors for 1990 are extrapolated back to 1950 using growth in per capita GDP from the national accounts (a *backcast*).  
The global poverty estimates for the period 1981–89 in figure 1.10 could differ from the official poverty rates available in PIP (<https://pip.worldbank.org>). For example, the increase in global poverty between 1989 and 1990 in PIP is driven by a methodological change in the welfare aggregate used to measure poverty in China, changing its survey-based welfare aggregate from a measure of income to a measure of consumption between 1987 and 1990. The backcast series avoids such data incomparability. However, backcasting poverty, similar to nowcasting poverty, imposes strong assumptions that introduce a considerable degree of uncertainty around the backcasted estimates.
15. On the one hand, the counterfactual is a hypothetical scenario and thus requires many assumptions. On the other hand, it allows estimation of the net impact of the pandemic in 2020, as opposed to the overall change from 2019 to 2020. This is an important distinction because, for example, some lower-income countries were expected to experience an increase in poverty in 2020 even without the pandemic (see figure 1.11).
16. World Bank, World Development Indicators (database), <https://databank.worldbank.org/source/world-development-indicators>.
17. Global average per capita income growth is expected to slow to 2 percent in 2022. Per capita incomes in LICs are expected to grow by only 0.6 percent in 2022. The recovery of LMICs is likely to stall in 2022, with an average per capita income increase of 0.6 percent, which is well short of the 2.4 percent average annual growth they saw for the 2010–19 period. Like the other income groups, UMICs and HICs are also expected to slow down the recovery in 2022 with per capita income increases of 3.1 percent in the upper-middle-income group and 2.9 percent in the high-income group.
18. For technical details, see Mahler et al. (2022).
19. The same figure for a person with a daily income of around US\$50—a typical income in HICs—is closer to 25 percent.
20. For the pre-COVID-19 projection series, growth rates from the January 2020 *Global Economic Prospects* are available only until 2022. Thus the pre-COVID-19 projection series uses historical average annual growth rates from 2023 onward. All projections rely

on the same pass-through rates used in the nowcast: 70 percent for countries using a consumption aggregate in their latest survey and a pass-through of 100 percent for countries using income aggregates.

21. This figure is in line with the projected global poverty rate of 6.1 percent (521 million poor) published in *Poverty and Shared Prosperity 2020* (World Bank 2020a). Changes to the projected estimates are due to several changes in the data and methodology between the two editions of the report: adoption of the 2017 PPPs, newly available survey data, changes to the nowcast methodology, and changes to national accounts data, among other things.
22. See chapter 3 for more details on the long-run growth models used. The setback from COVID-19 has put this target even further out of reach.

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