

Ending Extreme Poverty: Progress, but Uneven and Slowing

Chapter 1 presents the latest data on global and regional extreme poverty rates using the international poverty line of US\$1.90 in 2011 purchasing power parity dollars. The chapter discusses the trends, the geographical concentration, and the profile of extreme poverty. It also reflects on data coverage and methodological issues and their consequences on global estimates.

Extreme poverty declined to 10 percent of the world's population in 2015, meaning 1 person in every 10 in the world was living in extreme poverty. This rate dropped from nearly 36 percent in 1990, resulting in a world with more than a billion fewer people living in extreme poverty. Although this progress is remarkable, 10 percent equates to 736 million people still living in extreme poverty in 2015, and there is evidence that the pace of poverty reduction is starting to decelerate. There remain significant challenges to reaching the goal of a world free of poverty. Meeting the global target of reducing extreme poverty to less than 3 percent will require substantially greater efforts.

Monitoring extreme poverty: A quarter century of progress

The World Bank is committed to eradicating poverty. The twin goals of ending extreme poverty and promoting shared prosperity in a sustainable manner accord well with the post-2015 development agenda and the Sustainable Development Goals (SDGs) to ensure that all people can fulfill their potential in dignity and equality and in a healthy environment (box 1.1). Monitoring global poverty is critical for tracking progress and identifying areas that require additional policy actions.

In 2015, an estimated 736 million people were living below the international poverty line (IPL), currently set at US\$1.90 in 2011 purchasing power parity (PPP) dollars. The total count was down from 1.9 billion people in 1990. Despite the world population increasing by more than 2 billion people over this period, more than a billion fewer people

lived in poverty in 2015 than in 1990. Not only are there now fewer poor people but, on average, the poor are also now less poor. In 1990, the average shortfall between what the poor consumed and the IPL was 35 percent (of the IPL). This shortfall shrank to an average of 31 percent in 2015. The total consumption shortfall of the poor (the sum of all consumption shortfalls of the poor) in 2015 had shrunk to about one-third of its size from 1990. (For more details on the consumption shortfall of the poor, and the depth and severity of poverty, see annex 1A.) Despite this impressive progress in terms of the declining poverty rate, the number of poor, and the consumption shortfall of the poor, the number of people living in extreme poverty globally remains unacceptably high.

The World Bank has set a specific target to help guide the work in eradicating poverty: reduce the global share of people living in extreme poverty to less than 3 percent. Over

BOX 1.1 Alignment of the SDGs and the Twin Goals of the World Bank Group

On April 20, 2013, the Board of Executive Directors of the World Bank adopted two ambitious goals: *ending extreme poverty globally and promoting shared prosperity* in every country in a sustainable way. Progress toward the first of these goals is measured by monitoring the share of the global population living below the international poverty line. The World Bank set a target of reducing extreme poverty to less than 3 percent by 2030 and to ensure continued focus and steady progress toward the goal, the institution set an interim target of 9 percent by 2020.

The second goal is not defined globally, but rather tracks progress at the country level. Progress on the shared prosperity goal is measured by the growth in the average consumption or income expenditure of the poorest 40 percent of the population (the bottom 40) in a country. This goal is not associated with a target in 2030, but it reflects the aim that every country should promote the welfare of its least privileged citizens for a more inclusive and equitable society.

On September 25, 2015, the United Nations General Assembly adopted the 17 Sustainable Development Goals (SDGs) and 169 targets as part of the 2030 Agenda for Sustainable Development,

building on the Millennium Development Goals (MDGs). *Ending poverty in all its forms and dimensions* is the first of the 17 SDGs. The General Assembly Resolution recognizes that eradicating poverty is the greatest global challenge and an indispensable requirement for sustainable development.

The SDGs and the World Bank's twin goals are aligned. The goals of ending extreme poverty within a generation and promoting shared prosperity in a sustainable manner accord with the 2030 Agenda for Sustainable Development to ensure that all human beings can fulfill their potential in dignity and equality and in a healthy environment. In contrast to the SDGs, the World Bank's twin goals do not set distinct country-specific targets or targets for the multiple dimensions of poverty, equity, and sustainability. However, the World Bank recognizes that poverty is multidimensional, and sustainability is critical. The pursuit of these goals will require the concerted effort of all stakeholders. Over the years, the World Bank has collaborated with the United Nations in nearly every region and sector, and its engagement has deepened since the adoption of the MDGs, and now with the SDGs.

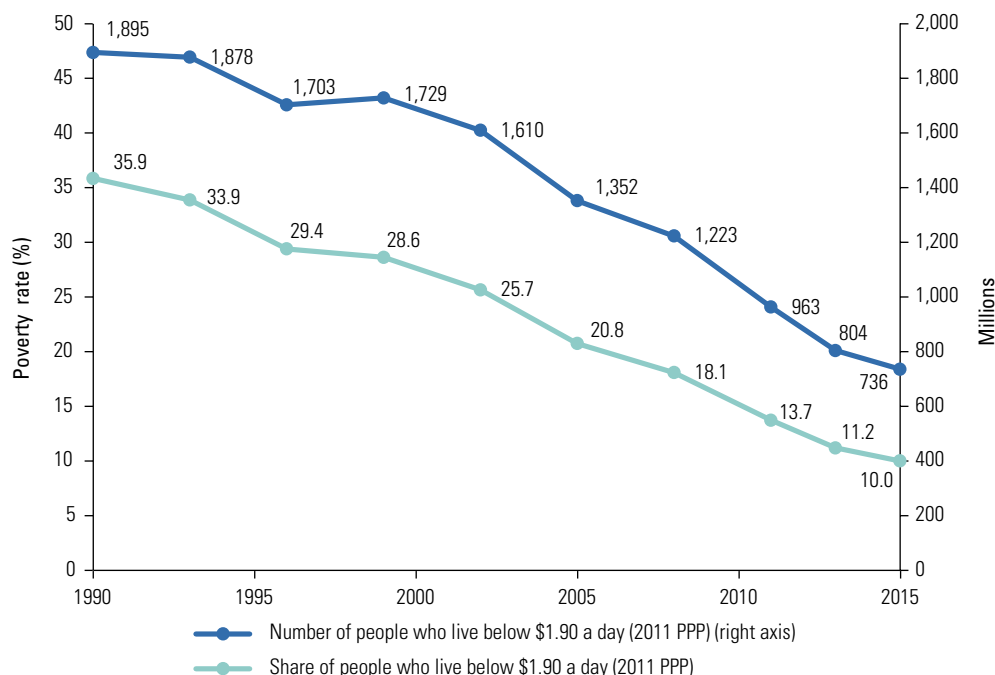
the last decades, remarkable progress has been made in reducing extreme poverty (figure 1.1; see box 1.2 for details on the data used). The world attained the first Millennium Development Goal—to cut the 1990 poverty rate in half by 2015—six years ahead of schedule. With continued reductions, the global poverty rate—the share of the world's population living below the IPL—dropped from about 36 percent in 1990 to 10 percent in 2015, that is, more than a 70 percent reduction.

Over the 25 years from 1990 to 2015, the global poverty rate fell by slightly more than 25 percentage points, or an average decline of 1 percentage point a year. (Gauged according to today's population, 1 percent equates to about 76 million people.) Given this trend of

steady poverty reduction, the world is clearly on track to reach the interim poverty target of 9 percent by 2020 set by the World Bank to monitor progress toward the 2030 goal.¹ Forecasts for 2018 indicate that this target has already been surpassed.

Reducing poverty to 3 percent by 2030 from 10 percent in 2015 will require an additional 7-percentage-point reduction in the poverty rate in 15 years. If, over the last 25 years, poverty has steadily declined at 1 percentage point a year, it would seem reasonable to assume that the world is well on track to reducing poverty by at least 7 percentage points over the next 15 years. The rate of poverty reduction could be cut in half to a 1-percentage-point decline every two years, and the world would still reach the 3 percent target.

FIGURE 1.1 Global Poverty Rate and Number of Poor, 1990–2015



Source: PovcalNet (online analysis tool), World Bank, Washington, DC, <http://iresearch.worldbank.org/PovcalNet/>.
 Note: PPP = purchasing power parity.

BOX 1.2 Data Overview

Data source

The data for this chapter come from PovcalNet, which is an online analysis tool for global poverty monitoring hosted by the World Bank (<http://iresearch.worldbank.org/PovcalNet>). PovcalNet was developed with the purpose of public replication of the World Bank’s poverty measures for the IPL. PovcalNet contains poverty estimates from more than 1,600 household surveys spanning 164 countries.^a Most of the surveys in PovcalNet are harmonized through the Global Monitoring Database, the World Bank’s repository of household surveys.

Derivation of country-level estimates

The national poverty rates from household surveys are based on measures of household consumption or income. In the current 2015 estimates, about 40 percent of the countries covered use income, but the use of income rather

than consumption has been increasing over time. The differences between income and consumption measures matter for comparing trends and patterns in poverty. To assure that the income and consumption levels from different countries are comparable, they need to be expressed in the same unit. To this end, consumer price indexes and purchasing power parities are applied. Because the frequency and timing of household surveys vary across countries, comparable country-level estimates require projecting the survey data to the reference year for which global poverty is expressed, here 2015. When the timing of surveys does not align with the reference year, PovcalNet “lines up” the survey estimates to the reference year.

Derivation of regional/global estimates

To arrive at a regional and global estimate of poverty, population-weighted

(continued)

BOX 1.2 Data Overview *(continued)*

average poverty rates are calculated for each region.^b Some countries have no household survey data to monitor poverty. No direct value is imputed for these countries; rather it is assumed that the average for the region based on the countries with data available is the same as the regional average for all countries. The number of poor in each region is the product of the region's poverty rate and the total regional population. The global

estimate of the number of poor is the product of the population-weighted mean of the regional poverty rates and the total world population.

Further information

For further information regarding the data sources, geographical regions, data issues, and assumptions underlying the global, regional, and country-level estimates, see appendix A at the end of the report.

- a. The term country, used interchangeably with economy, does not imply political independence but refers to any territory for which authorities report separate social or economic statistics.
- b. Population estimates are usually based on national population censuses. Estimates for the years before and after the census are interpolations or extrapolations based on demographic models (Source: World Development Indicators).

Despite this optimistic portrait of the path toward the target, there are reasons for concern. One reason is the existence of some evidence that the rate of poverty reduction has recently slowed. Between 2011 and 2013, poverty declined by 2.5 percentage points, but, over the two years between 2013 and 2015, it declined by only 1.2 points. Although this apparent change in the rate of poverty reduction over these two years should be interpreted with caution because of data challenges, it is a first potential signal of change.

To assess whether this recent change in the path of poverty reduction is an aberration or a warning sign of what the future holds, forecasts of how poverty may evolve up to 2030 can be very informative. Such forecasts should be viewed with caution though, because the factors that affect global poverty reduction are complex, and because what the future holds is unknown. For example, economic growth is a key factor in reducing poverty, but it can be volatile and difficult to predict. Nonetheless, without forecasts, it is not possible to clarify whether the current trajectory is adequate to reach the target.

Nowcasts and forecasts to 2030

The current estimate of the global poverty rate—10 percent—refers to 2015, which is three years out of date. Why in 2018 is pov-

erty reported for 2015? The global poverty estimates are based on household surveys from 164 countries, and these surveys are carried out independently, typically by national statistical offices or national planning ministries. The surveys are complex and lengthy, requiring significant amounts of labor and time to be implemented effectively; and, in most countries, they are not carried out every year. Countries implement household surveys that measure poverty status once every three to five years (Serajuddin et al. 2015). It also takes time to gather, process, and analyze these data. There is thus frequently a lag between the completion of the survey fieldwork and the publication of the data for the global poverty counts (Independent Evaluation Group 2015). For these reasons, 2015 is the most recent year for which there are sufficient data to estimate a global poverty rate.² (For details on how data are shifted forward and backward in time to produce the 2015 estimate, see appendix A at the end of the report.)

However, if assumptions are made about the relationship between economic growth as observed in national accounts (such as the real growth in gross domestic product [GDP]) and in surveys, as well as on population projections, it is possible to nowcast the global poverty rate in 2018 and also generate scenarios about global poverty in 2030.³ To nowcast poverty in 2018, it is assumed that

each household's welfare grows at a fraction of the growth in GDP per capita. Only a fraction of the growth in GDP per capita is passed through to the welfare vector because there is a historical divergence between growth in consumption or income observed in surveys and the growth observed in national accounts. The fraction that is passed through to the welfare vector is based on examining past data on the average relationship between survey means and national accounts data (Prydz, Jolliffe, and Serajuddin, forthcoming).⁴ With this approach, it is assumed that the scaled growth accrued equally (in proportionate terms) to everyone in a country regardless of individual income level. If inequality changed from 2015 to 2018, this assumption will not hold, and poverty will be higher or lower depending on the change in inequality (World Bank 2016b; Lakner, Negre, and Prydz 2014).

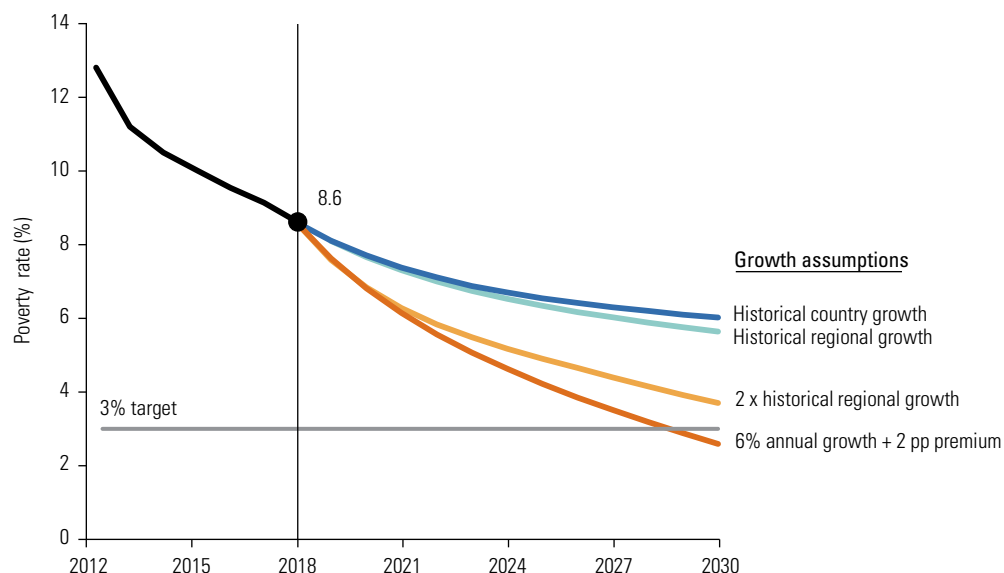
Under these assumptions, the 2018 nowcast for the global poverty rate is 8.6 percent (figure 1.2). This means that the 2020 interim target has likely already been achieved. One important implication of this estimate is that it provides another piece of evidence

that there seems to be a significant slowdown in the rate of global poverty reduction. From 2013 to 2015, poverty declined by 0.6 percentage points per year; this is slower than the 25-year average decline of a percentage point per year. Between 2015 and 2018 the nowcast suggests that the rate of poverty reduction has further slowed to less than half a point per year.

Projecting global poverty to 2030 is more challenging, but it is possible to consider how global poverty may evolve under different scenarios. Four scenarios are considered as described below. The first scenario assumes that every country grows at its average growth rate from 2005–15. This growth rate is then used to “grow” the household survey mean over time, in a way that does not change the level of inequality. This approach makes it possible to move the entire distribution of consumption or income forward in time, starting with the 2018 nowcast and moving up to 2030.

The second scenario is like the first, except for one difference: the growth rate for each country is not its historical average, but rather the historical average for its region.

FIGURE 1.2 Global Poverty Rate Projections to 2030



Source: PovcalNet (online analysis tool), World Bank, Washington, DC, <http://iresearch.worldbank.org/PovcalNet/>; World Development Indicators; World Economic Outlook; Global Economic Prospects; Economist Intelligence Unit.

Note: The 2018 nowcast uses realized and projected growth in GDP per capita and household final consumption expenditure per capita from 2015 to 2018 to grow the 2015 welfare vector. “Historical country (regional) growth” assumes that the annual growth rates countries (regions) experienced from 2005 to 2015 continue from 2018 to 2030. “6% annual growth + 2 pp premium” assumes that all countries grow by 6 percent annually from 2018 to 2030, and that the bottom 40 percent on average grow with an additional 2 percentage points (pp). All assumed growth rates are real, per capita growth.

For each region, the average annualized real growth rate between 2005 and 2015 is estimated and then used as the growth rate for each country in the region. The third scenario is identical to the second but uses *twice* the historical regional growth averages. These three scenarios all assume that inequality in the country remains unchanged until 2030.

The final scenario explores what happens if growth is pro-poor; if the bottom 40 percent on average grows faster than the country as a whole. This scenario, not anchored to any empirical data, assumes that each country grows by 6 percent annually toward 2030, but that the bottom 40 percent, on average, grows by 8 percent annually (while the top 60 percent grows at 4.7 percent, resulting in the average of 6 percent). Because the bottom 40 percent grows at a rate that is 2 percentage points faster than the average, this is referred to as a shared prosperity premium of 2 percentage points. In all these scenarios, growth rates in either GDP per capita or household final consumption expenditure (HFCE) per capita are rescaled to account for the difference between survey means and national accounts as discussed above.⁵

The scenarios based on growth rates that correspond with historical performance of the countries, or of the average performance of the region do not come close to reaching the target (figure 1.2). Both scenarios suggest global poverty rates in the range of 6 percent in 2030. The third scenario, where it is assumed that all countries grow by *twice* the average regional growth rate over the past ten years, also falls short of the 3 percent target. This scenario predicts a global poverty rate of 3.7 percent in 2030.

This is an alarming finding.

The only scenario where the 3 percent target is met is when a real annual growth rate of 6 percent and a shared prosperity premium of 2 percentage points are assumed.⁶ The most important element of this scenario is that Sub-Saharan Africa is assumed to grow steadily at this rate for 12 straight years up through 2030. In considering this scenario, it is useful to note that between 2000 and 2015 Sub-Saharan Africa has never had a 10-year average growth rate near 6 percent—let alone 8 percent for the bottom 40. The highest average growth rate was around 2010, when its

10-year historic average growth rate (based on growth from 2000 to 2010) was almost 4 percent, but this was sustained for only a few years and has since declined slightly.

How can it be that poverty has declined by 25 percentage points over the last 25 years, yet the only forecasts that suggest poverty will be reduced by 7 percentage points over the next 15 years are based on unprecedented growth patterns and rates?

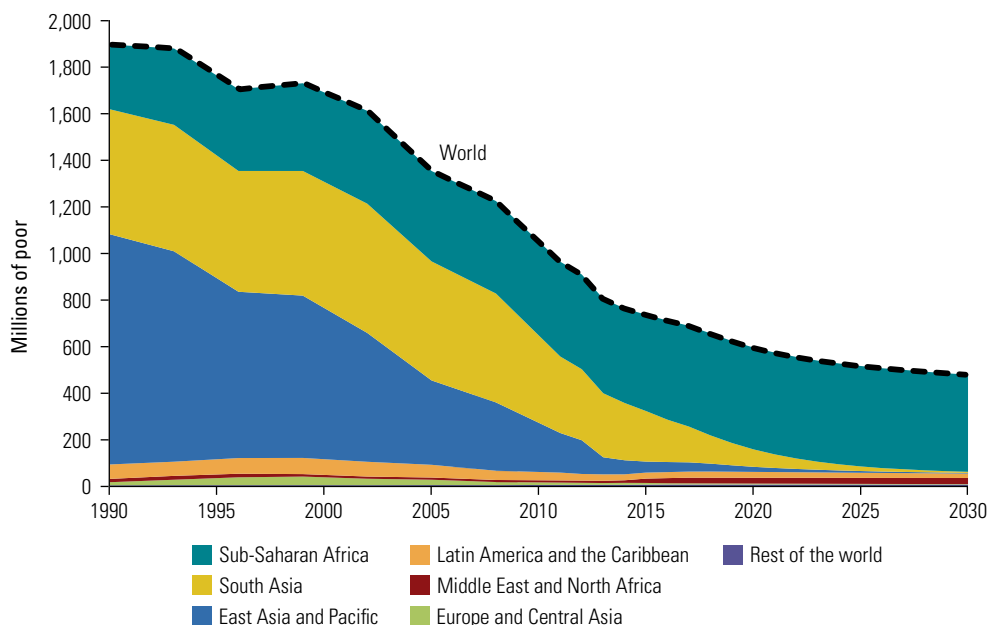
Uneven progress: A regional profile of poverty reduction

There are several parts to the answer of this question and many of them hinge on the general idea that progress has been uneven, which is linked to the theme of this report. A slightly more specific answer to the question posed above is that not all regions have shared in the benefits of the global reduction in poverty.

To better understand why the simulations forecast a challenging path for reaching the target, it is useful to examine the changing regional profile of poverty that has been brought about by the differing rates of poverty reduction. Between 1990 and 2015, the regional profile of poverty has changed significantly. In 2015, more than half of the global poor resided in Sub-Saharan Africa and more than 85 percent of the poor resided in either Sub-Saharan Africa or South Asia (figure 1.3). The remaining 14 percent of the global poor, or about 106 million poor people, lived in the other four regions or in high-income economies.⁷

This is a dramatic shift from 1990, when over half of the poor were living in East Asia and Pacific. The two regions with the most poor people in 1990 were East Asia and Pacific and South Asia, which were home to 80 percent of the poor. With China's rapid reduction of poverty, the concentration of the global poor shifted from East Asia and Pacific in the 1990s to South Asia in 2002, and then to Sub-Saharan Africa in 2010. In South Asia, both the poverty rate and number of poor have been steadily declining, but, given the sheer size of the populations, the contribution to global poverty continues to be high. This contrasts with Sub-Saharan Africa, where the total count of poor people in this region has been increasing, essentially lead-

FIGURE 1.3 Number of Poor by Region, 1990–2030



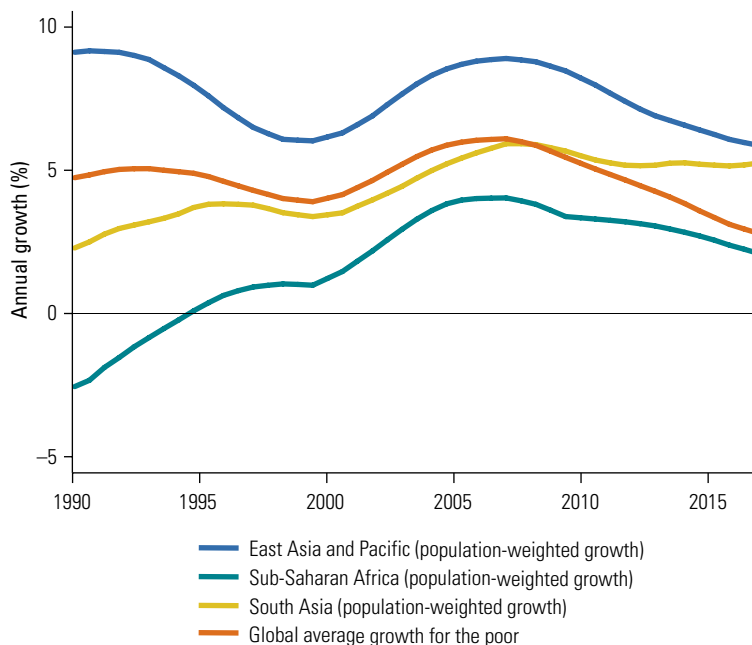
Source: PovcalNet (online analysis tool), World Bank, Washington, DC, <http://iresearch.worldbank.org/PovcalNet/>. World Development Indicators; World Economic Outlook; Global Economic Prospects; Economist Intelligence Unit.

ing to the shifting concentration of poverty from South Asia to Sub-Saharan Africa.

This pattern is likely to continue in the coming decade. Simulations show that, as the number of poor continues to decline in South Asia, the forecasts based on historical regional performance indicate that there will be no matching decline in poverty in Sub-Saharan Africa (figure 1.3). In 2030, the share of the global poor residing in Sub-Saharan Africa is forecasted to be about 87 percent, if economic growth over the next 12 years is similar to historical growth patterns. (For more details on the simulations, see annex 1B.)

One important reason for the changing regional concentration of poverty, and the projected increase in the share of the global poor residing in Sub-Saharan Africa, is the regional differences in per capita GDP growth. Focusing on the three regions that have accounted for the bulk of the poor, the average annual growth rate since 1990 has consistently been highest in the East Asia and Pacific region (between 5 and 10 percent), followed by South Asia, and then Sub-Saharan Africa. South Asia has maintained an average growth rate between 5 and 6 percent over the last decade (figure 1.4). The average growth rate in

FIGURE 1.4 Regional GDP per Capita Growth Rates and Average Growth Rate for the Poor, 1990–2017



Source: PovcalNet (online analysis tool), World Bank, Washington, DC, <http://iresearch.worldbank.org/PovcalNet/>; World Development Indicators.

Note: The orange line reflects the average growth rate as experienced by the population of people in extreme poverty. It is a weighted average of country growth rates where the weights are the number of extreme poor in each country. All curves fit a local polynomial through the annual growth rates to smooth out year-to-year fluctuations.

Sub-Saharan Africa has rarely exceeded 5 percent and has decreased in recent years.

Growth is an important driver of poverty reduction, and, throughout the 1990s and early 2000s, the vast majority of the poor lived in countries with relatively high growth rates. Over the last few years, as the concentration of poverty has shifted to Sub-Saharan Africa, the majority of the poor now live in countries with lower-than-average growth rates (figure 1.4). The orange line in figure 1.4 reflects this change because it is a weighted average of country growth rates where the weights are the number of extreme poor in each country. As the concentration of poor moved from high-growth to low-growth countries, this shift led to a significant deceleration in the rate at which poverty has been declining.

Not only has the growth rate in the countries with the most poor declined in recent years but the conversion of growth to poverty reduction—the growth elasticity of poverty—has also historically been lower in Sub-Saharan Africa. Hence, a given growth rate buys less poverty reduction in Sub-Saharan Africa than in most other regions of the world.

The changing regional concentration of poverty reflects the highly uneven rate of poverty reduction across countries of the world. Of the 164 countries for which the World Bank monitors poverty, more than half—84 countries—have already reached poverty rates below 3 percent as of 2015. The median poverty rate of the 164 countries in 2015 is 2.7 percent; this median in 2018 is estimated to be 1.9 percent. This success in having more than half the countries of the world with poverty rates below 3 percent is also part of the reason why the world is now starting to experience a slowdown in the rate of poverty reduction. There are now fewer countries than before with large populations of poor people. Previously, progress in poverty reduction could shift over time from one country or region to another, but now there is less scope for this. The slowdown that is observed at the global level does not mean that poverty reduction is declining in every country; however, it does mean that the number of countries where there have been significant declines in the number of poor people is shrinking.

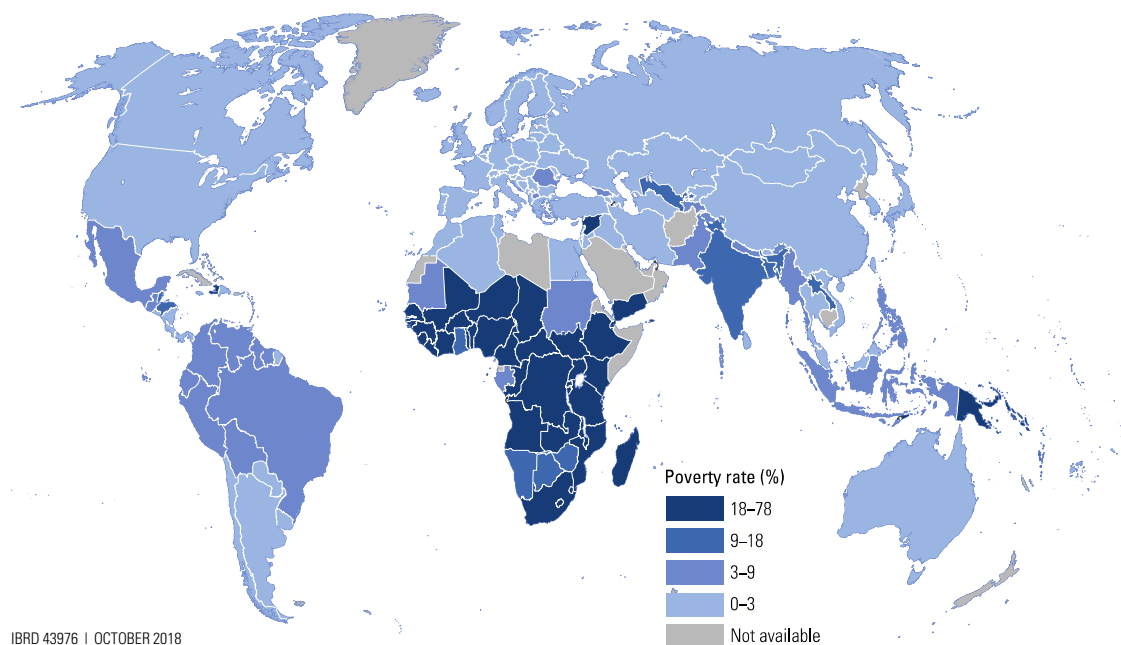
As extreme poverty becomes increasingly concentrated, significant progress in reduc-

ing the global poverty count will occur only if progress is primarily made in those countries where poverty is greatest. This is not to say that countries with extreme poverty rates below 3 percent cannot make further progress. Where there is poverty, there is still much work to be done. But the core indicator the World Bank will track up through 2030 is to reduce the global rate of extreme poverty to less than 3 percent.

If the goal is a world free of poverty, why is progress monitored toward 3 percent and not zero percent? The 3 percent target comes from both empirical and conceptual considerations. Empirically, poverty in some countries remains deep, entrenched, and widespread; and, when the target was initially set, 3 percent was considered an ambitious but feasible target (Jolliffe et al. 2015). Conceptually, however, there is also an important reason for setting the target at some level greater than zero percent. The purpose of a target is to assist in efforts to attain goals. For targets to help, they need to be credibly measured and monitored. The key conceptual concern then is that, in general, sample surveys from large populations cannot measure rare outcomes well. As countries make progress toward eliminating extreme poverty, the accuracy with which samples can measure the increasingly lower rates deteriorates. At the extreme, sample surveys essentially cannot credibly measure a poverty rate of zero percent. In part for this reason, progress is monitored toward 3 percent, which can be credibly measured and is also an ambitious goal.

Map 1.1 shows the countries that have poverty rates in 2015 of less than 3 percent and highlights the countries that have reached the interim 9 percent target set for 2020. In addition to the 84 countries with poverty rates less than 3 percent, there are 23 countries with poverty rates less than 9 percent. Two-thirds of the countries have rates less than 9 percent. Of the remaining one-third, though, the story is different. In about half of these countries, the poverty rate is greater than 30 percent; and, in 11 countries, the poverty rate is greater than 50 percent. The impressive progress in terms of reducing global poverty to 10 percent globally masks an incredibly high amount of variation of success at the country level in reducing poverty.

MAP 1.1 Poverty Rate by Country, 2015



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Source: PovcalNet (online analysis tool), World Bank, Washington, DC, <http://iresearch.worldbank.org/PovcalNet/>.

Map 1.1 also marks countries with poverty rates between 9 and 18 percent in 2015. This subsample has been created using the simplistic assumption that these countries, if they succeed in reducing poverty by 1 percentage point a year, will have poverty rates less than 3 percent by 2030. There are 121 countries with poverty rates at or below 18 percent in 2015, and only 43 countries have poverty rates that are higher than this. A closer examination of these countries provides more evidence as to why the 2030 forecasts indicate that attaining the 3 percent target will be a hard battle.

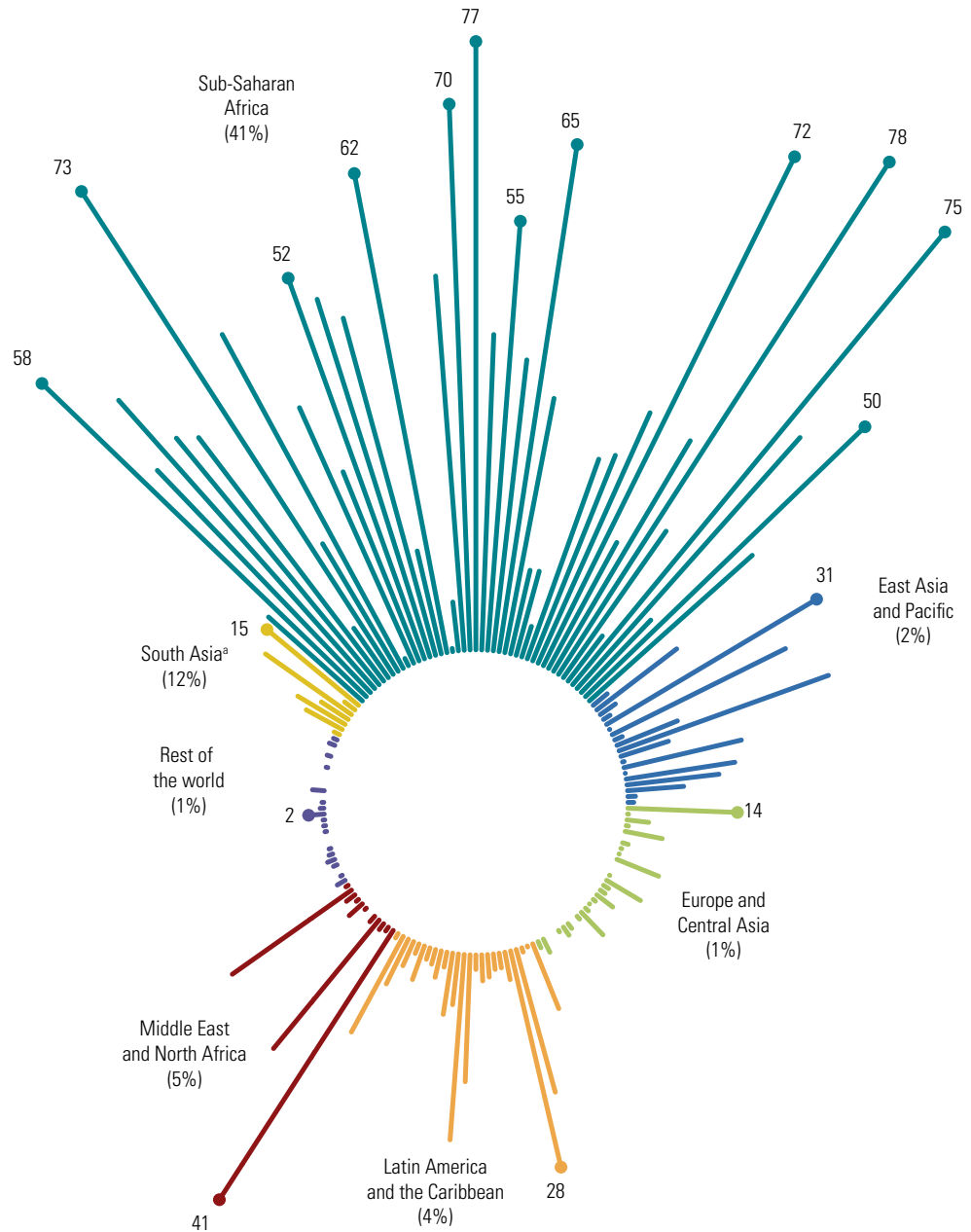
The map reveals that most of the 43 countries with poverty rates above 18 percent are in Sub-Saharan Africa. Three-fourths of Sub-Saharan African countries had poverty rates above 18 percent in 2015, and, of the world's 28 poorest countries (that is, those with the highest rates of poverty), 27 are in Sub-Saharan Africa, all with poverty rates above 30 percent (figure 1.5).

In all regions except for Sub-Saharan Africa, the regional average rate is well below 18 percent, whereas in Sub-Saharan Africa about 41 percent live below the IPL (figure 1.5). It hasn't always been like this. In 1990,

the average poverty rate in countries from the East Asia and Pacific region was higher; but, whereas the rates in these countries quickly declined over the years, the decline in the poverty rate in Sub-Saharan Africa was much slower (figure 1.6). Although the percentage of poor in Sub-Saharan Africa has slowly declined, this decline has not been fast enough to counter a growing population—the total population of poor people there has steadily increased from 1990 to 2015 (table 1A.1 in annex 1A).⁸ Economic growth and pro-poor policies in Sub-Saharan Africa over the last 25 years have had anemic benefits in terms of reducing poverty. For simulations that use historical average growth rates as estimates for future growth rates, the predicted future path for the Sub-Saharan Africa rate of poverty reduction would continue to be weak and inadequate to bring global poverty to below 3 percent.

Although poverty is comparatively much lower in the Middle East and North Africa, the share of the population in extreme poverty increased to 5.0 percent in 2015, up from 2.6 percent in 2013, while the number of poor almost doubled from 9.5 million in 2013 to 18.6 million in 2015. Although these recent

FIGURE 1.5 Poverty Rate by Region and Country, 2015



Source: PovcalNet (online analysis tool), World Bank, Washington, DC, <http://iresearch.worldbank.org/PovcalNet/>.

Note: Population-weighted regional average shown in parentheses. Each spike represents a country and all countries within a region are the same color. Within each region, spikes are numbered with the poverty rate if they have the highest rate within the region or if their poverty rate is greater than 50 percent.

a. This estimate is based on a regional population coverage less than 40 percent. The criterion for estimating survey population coverage is whether at least one survey used in the reference year estimate was conducted within two years of the reference year.

estimates should be interpreted with caution because of underlying data challenges, they are a stark reminder that past gains cannot be taken for granted. To ensure that progress does not unravel, the risks of falling back into

economic deprivation must be managed efficiently and collectively (World Bank 2013). If not, the risks can turn into economic, environmental and political crises, as in the Middle East and North Africa, where fragility

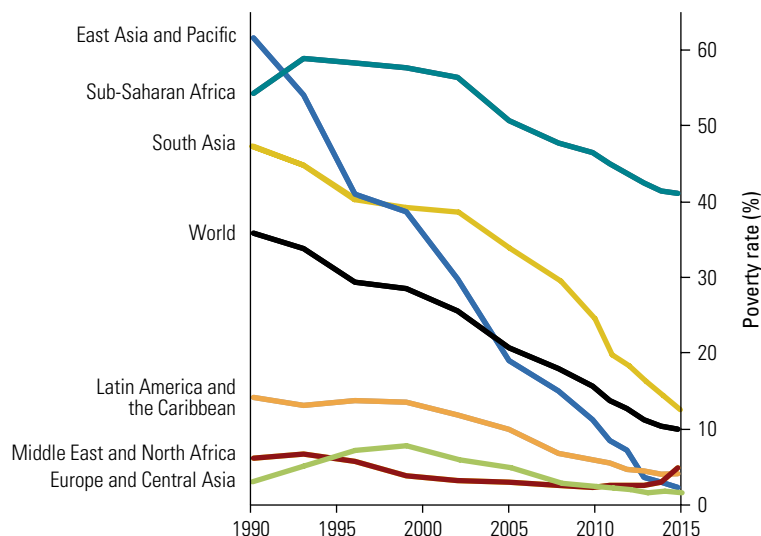
and conflict in the region are impacting livelihoods and manifesting in the recent spike in poverty.

Drilling down: The countries with the most poor

Over time, many of the countries with high poverty numbers, including Bangladesh, India, Indonesia, Kenya, and Nigeria, have grown their economies out of low-income-country status and are now middle-income countries. With this growth, most of the extreme poor have also moved from being in low-income to being in middle-income countries, and nearly two-thirds of the world's poor people now reside in middle-income countries (figure 1.7). However, as more countries shift from low- to middle-income status, so does the population share. As of 2015, 5.5 billion people lived in middle-income countries as opposed to about 640 million in low-income countries, explaining why most of the extreme poor—over 400 million—now reside in lower-middle-income countries. As countries develop and per capita GDP increases, poverty rates tend to fall as economic opportunities are expanded. This general trend can be seen in figure 1.7, with the poverty rate declining from 42 percent for low-income countries to 14 percent for lower-middle-income countries, and close to 2 percent for upper-middle-income countries. This situation is promising for continued poverty reduction if more poor people can benefit from economic growth. Conversely, nearly every low-income country is in Sub-Saharan Africa (and a few countries in other regions, namely Afghanistan, Haiti, the Democratic People's Republic of Korea, and Nepal according to the fiscal year 2018), highlighting the need to stimulate and sustain economic growth in low-income countries.

Drilling down a bit further into the countries that have the largest population of poor people, figure 1.8 lists all countries by the share of the global poor in 2015. Half of the people living in extreme poverty in 2015 can be found in just five countries. The most populous countries in South Asia (Bangladesh and India) and Sub-Saharan Africa (Democratic Republic of Congo, Ethiopia, and Ni-

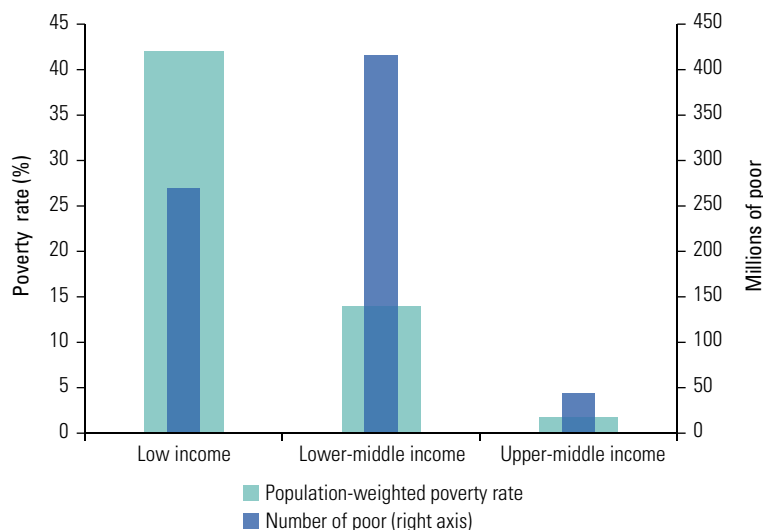
FIGURE 1.6 Poverty Rate, Regional and World Trends, 1990–2015



Source: PovcalNet (online analysis tool), World Bank, Washington, DC, <http://iresearch.worldbank.org/PovcalNet/>.

Note: The regional estimates for Europe and Central Asia in 1990 and South Asia in 1999 and 2015 are based on regional population coverage of less than 40 percent. The criterion for estimating survey population coverage is whether at least one survey used in the reference year estimate was conducted within two years of the reference year. Because of the low coverage, these numbers are censored in PovcalNet.

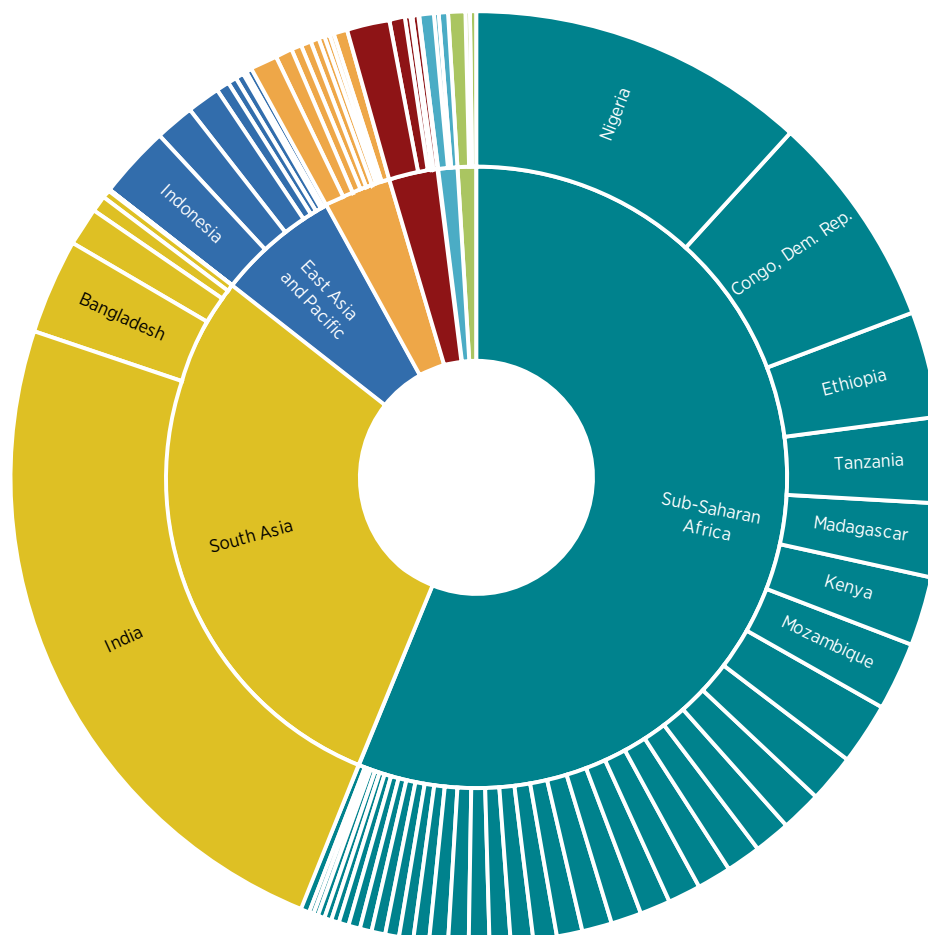
FIGURE 1.7 Poverty Rate and Number of Poor, by Income Group, 2015



Source: PovcalNet (online analysis tool), World Bank, Washington, DC, <http://iresearch.worldbank.org/PovcalNet/>.

geria) are the five topping the list of countries with the greatest number of extreme poor. India, with over 170 million poor people in 2015, has the highest number of poor people and accounts for nearly a quarter of global

FIGURE 1.8 Distribution of the Global Poor by Region and Country, 2015



Source: PovcalNet (online analysis tool), World Bank, Washington, DC, <http://research.worldbank.org/PovcalNet/>.

Note: The inner circle is proportionate to the percentage of the total population of poor people living in each region. The outer circle is similarly proportionate, but at the country level. The 10 countries with the most poor people in the world are listed.

poverty. In the South Asia region, four out of five extreme poor reside in India. Despite a poverty rate of 13.4 percent, India's large population of 1.3 billion results in a high absolute number of poor. To achieve the global poverty goal, progress in poverty reduction needs to continue in India.

India's placement as the country with the most poor people in the world is likely to change in the near future. In fact, projections indicate that Nigeria may already have overtaken India. The uncertainty about whether India or Nigeria is currently the country with the most poor people is in part simply because the countries are near a crossing point (having either recently switched or being on

the verge of switching). But the uncertainty about when they have switched or will switch also reflects a series of difficult measurement issues related to global poverty counts. Discussing some of these issues is useful because it can help convey a sense of the level of (im)precision of the poverty counts, and it allows for transparency in the strengths and weaknesses of the data and methods.

In the case of Nigeria, there is one key concern with current poverty estimates. Both the 2015 estimate and the 2018 nowcast for Nigeria are based on household survey data collected in 2009. To estimate extreme poverty in 2015 for Nigeria, the survey mean from the 2009 data was increased at a rate equal to the

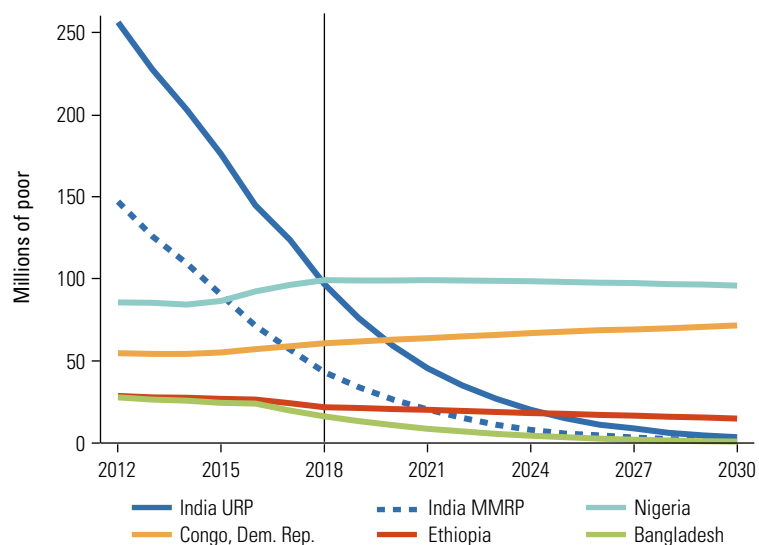
country's GDP per capita growth rate (which is estimated annually) and it is assumed that the level of inequality was unchanged over those six years. Similarly, for 2018, the mean is shifted forward on the basis of nine years of growth estimates and assuming unchanged inequality. Although growth measured in surveys used for poverty estimation is correlated with growth as measured by national accounts data such as GDP, there can be sizeable differences and these differences can have substantial impact on estimated poverty rates. Similarly, if the assumption that the distribution (or inequality) has not changed since 2009 is wrong, this too can lead to substantial error in the estimated poverty rate (Jolliffe et al. 2015).

There are two important measurement issues that also temper confidence in the India poverty estimates. The first is similar to the issue for Nigeria. The last round of poverty data available was collected in 2011–12. For India, however, an additional round of the National Sample Survey (NSS), collected in 2014–15, has the same socioeconomic and demographic information as the 2011–12, and both provide data on household expenditures on services and durables. The 2014–15 NSS also contains three additional schedules with consumption data that were designed to test the potential for changing the questionnaire design, but these data are not in the public domain and were not available for analysis. Given the importance of India to the total poverty count, and the availability of the same socioeconomic, demographic, geographic, and limited consumption data at two points in time, a model of consumption was estimated on the basis of the common variables at these two points in time. The change in the characteristics of the population of India is leveraged to estimate how much consumption increased over time (in a manner that avoids assuming that inequality did not change). For the cases of both India and Nigeria, the lack of recent data available for analysis results in poverty estimates that are almost certainly much less precise than many other estimates in this report.

The other measurement issue is that there are many different ways to ask survey respondents about their consumption habits,

and how one asks has a significant effect on how people respond (Backiny-Yetna, Steele, and Djima 2017; Beegle et al. 2012; Gibson, Huang, and Rozelle 2003; Jolliffe 2001). Over the years, changes have been introduced in the recall period in the NSS Consumer Expenditure Survey, the official instrument for estimating poverty in India. The extreme poverty rate for India as reported here is currently based on an old questionnaire design. With the next NSS data that will be made publicly available, it will no longer be possible to estimate consumption using the same questions and the extreme poverty measure will be estimated using a new questionnaire design. The 2018 nowcast estimates for India indicate that switching from the old to the new questionnaire results in a significantly higher level of total consumption that reclassifies more than 50 million people from poor to not poor. Whenever the next round of NSS data is released (using the new questionnaire), backcasted estimates of poverty in 2015 will most likely show significantly fewer people living in extreme poverty (figure 1.9). For more details on these measurement issues for India, see box 1.3.

FIGURE 1.9 Poverty Projections for the Five Countries with the Most Poor in 2015



Source: PovcalNet (online analysis tool), World Bank, Washington, DC, <http://iresearch.worldbank.org/PovcalNet/>; World Development Indicators; World Economic Outlook; Global Economic Prospects. Note: India URP (Uniform Reference Period) relies on poverty estimates and projections based on a uniform recall period; India MMRP (Modified Mixed Reference Period) relies on poverty estimates and projections based on the modified mixed recall period.

BOX 1.3 India: Issues with the 2015 Poverty Estimate and 2030 Forecasts

The 2015 estimate, 2018 nowcast, and 2030 forecasts for India merit special mention given both the importance of India to the global poverty count and the particularly challenging measurement issues. One source of the problem arises from the fact that only a subset of the 2014–15 survey data was released by the government. There are two key issues, the first of which is linked to how survey data from 2011–12 and 2014–15 are used to estimate poverty in India for 2015. The second issue is linked to an impending switch in how India measures consumption, which is the foundation of the poverty estimate.

2015 poverty estimates for India: Imputing consumption

The usual methodology for lining up countries to the reference year (for this report, 2015) is based on two assumptions: the survey mean grows at the same rate as HFCE or GDP per capita, and there is no change in the distribution of consumption. These assumptions may be reasonable when adjusting over a short period of time, but they become problematic as the distance between the survey year and the lineup year increases (Jolliffe et al. 2015).

The latest survey with official poverty estimates for India was conducted in 2011–12, so a 2015 lineup would imply adjusting the survey forward four years. With an HFCE growth rate of 21 percent in India from 2011–12 to 2015, the welfare aggregate for all

households in the 2011–12 survey would be given a growth rate of 21 percent, and poverty in 2015 would be estimated using this adjusted welfare vector. Given India's importance for the global poverty rate, and the availability of a newer survey (albeit without a full consumption aggregate), it was felt that this extrapolation method needed to be cross-validated.

For this reason, the 2015 poverty estimate for India is based on survey-to-survey imputation method to estimate the growth rate in HFCE. The method uses the 2014–15 National Sample Survey (NSS) that collected consumption information on only a small subset of items but included questions on several correlates of household consumption like household size, age composition of the household, caste status, and labor market indicators. In the first step, a model of the relationship between per capita household consumption and household characteristics is developed using the NSS data from 2004–5, 2009–10, and 2011–12. These surveys have the full consumption questions as well as the variables used in the model. In the second step, the estimated relationship is imposed on the 2014–15 data to predict household consumption and poverty status. See Newhouse and Vyas (2018) for more details on the modeling exercise.

PovcalNet uses the poverty rates at US\$1.90 estimated by Newhouse and Vyas (2018) (10.0 percent for urban and 16.8 percent for rural

areas) to calibrate the growth rate in survey mean consumption between 2011–12 and 2014–15. The fraction of growth from national accounts that is passed through to growth in the survey mean implied by this procedure is 55.9 percent for urban India and 73.3 percent for rural India. Earlier projections had used a pass-through of 57 percent (for both urban and rural areas), which was based on the observed historical relationship between the survey and national accounts growth rates (Jolliffe et al. 2015, chapter 1, footnote 14; Ravallion 2003).

The new method used for India marks the first time the World Bank is using inputs from survey-to-survey imputation methods. Thus, there can be a variation in the poverty estimate obtained from the new method and the conventional HFCE-based method. The 2015 extreme poverty rate for India with the imputation-based growth rate is 2.5 percentage points higher than with the HFCE growth rate (13.4 percent versus 10.9 percent).

In the coming years, when countries do not have surveys with full consumption modules, but have other smaller surveys with partial coverage, similar methods may be applied to minimize reliance on the two assumptions implicit in the HFCE approach. Household surveys with full consumption modules are undoubtedly the preferred approach, and only in exceptional cases will the imputation approach be relied upon.

The new imputation approach implies that the poverty estimate

(continued)

With the cautions in mind that consumption in 2015 for both India and Nigeria is based on projections, not direct enumerations of consumption from recent household surveys, the nowcast for 2018 suggests that

Nigeria is now the country with the most poor people in the world (figure 1.9). When examining a scenario where the consumption measure for India is based on the new questionnaire rather than the old one, the esti-

BOX 1.3 India: Issues with the 2015 Poverty Estimate and 2030 Forecasts (continued)

for India in 2013 needs to also be updated. It has been revised from 16.5 percent to 17.8 percent. The new estimate is based on an average of the estimate from the 2011–12 survey and the 2014–15 survey, where, prior to averaging, the estimates have been lined up to 2013 using the HFCE-based approach described above. This lineup is based on a shorter time period where the two assumptions are less problematic.

An impending change in how consumption is enumerated: Questionnaire design

Recall period affects reported consumption through two main channels: memory decay and telescoping. A longer recall period is better at encompassing expenditure on infrequently purchased items, but it can lead to underreporting if respondents forget about the past purchases. Despite lower average consumption, measured poverty might be lower under the longer recall period because it captures the purchases of low-frequency items of households in the lower parts of the distribution. Short recall periods can mitigate underreporting but can lead to telescoping, where respondents mistakenly report the consumption that took place outside of the reference period.

Until 1993–94, the consumption data in India were collected using

the Uniform Reference Period (URP) method under which questions on household expenditure data for all items were asked for the previous 30-day period. After a series of experiments in the “thin” survey rounds from 1994–95 to 1998, the Mixed Reference Period (MRP) method was introduced in the 1999–2000 survey round in which expenditure on food, *pan*, and tobacco was collected using 7-day and 30-day recall periods, and the expenditure data for five nonfood items—clothing, footwear, durable goods, education expenses, and institutional medical expenses—were collected using a 365-day recall period (Deaton and Kozel 2005).

With the 2011–12 round of the NSS, the Modified Mixed Reference Period (MMRP) was introduced where the recall period was set at 7 days for perishable items, 365 days for the five low-frequency items, and 30 days for the remaining items (Government of India, Planning Commission 2014). For the sake of comparability over time, the World Bank global poverty count has been based on consumption measures derived from the URP instrument. With the next NSS Consumption and Expenditure Survey, India is no longer enumerating consumption with the URP. This means that the global poverty count produced by the World Bank will soon no longer

be based on the URP for India and a switch to the MMRP will occur.

The choice of method can significantly affect total household consumption and poverty estimates. The official 2004–05 poverty rate for India with the URP-based consumption data was 27.5 percent. The corresponding figure for the MRP-based consumption data was 21.8 percent (Government of India 2007). These changes did not, however, affect the estimates of extreme poverty because the World Bank continued to use the URP-based aggregate for international poverty monitoring to maintain comparability with historical estimates. The poverty estimates and forecasts for India presented here, based on MMRP (figure 1.9), similarly indicate a significant decline in the number of poor people. An important caveat, however, is that the difference in the count of extreme poor as measured by URP and MMRP dissipates with economic growth.

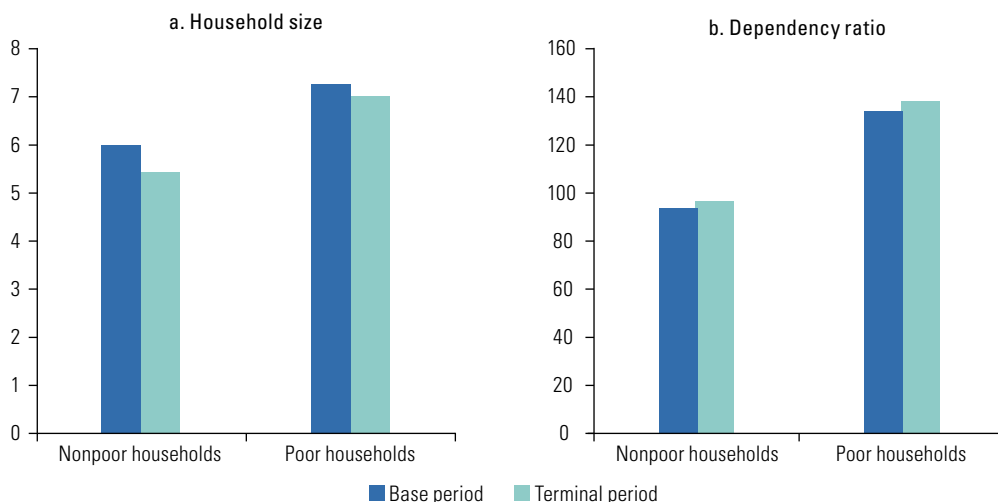
In the most recent “thick” round of the NSS Consumer Expenditure Survey, India has phased out the URP as well as the MRP questions, which means extreme poverty can no longer be tracked using the URP-aggregate. The next update of global poverty will likely show a sizeable drop in the extreme poverty rate and the number of the poor because of India’s switch to the MMRP-based consumption aggregate.

mates indicate that Nigeria overtook India in 2015 as the country with the most poor people in the world. These projections are based on old surveys and strong assumptions, but, if the historically observed patterns in India and Nigeria continue, Nigeria either already is or soon will be the country with the most poor people in the world.

Drilling down: Africa and fragile and conflict-affected countries

In 2002, Sub-Saharan Africa was home to less than a quarter of the world’s poor, whereas, in 2015, more extreme poor lived in the region (413 million) than everywhere else in the world combined. If this trend continues

FIGURE 1.10 Household Size and Dependency Ratio in Sub-Saharan Africa



Source: World Bank Africa Poverty database.

Note: The median years for the base period and the terminal period are 2004 and 2011, respectively. Dependency ratio is the ratio of dependents (people younger than 15 or older than 64) to the working-age population (ages 15–64).

as the forecasts suggest, extreme poverty will soon become a predominantly African phenomenon. An important first step in tackling poverty in the region is to better understand the factors associated with poverty in Sub-Saharan Africa.

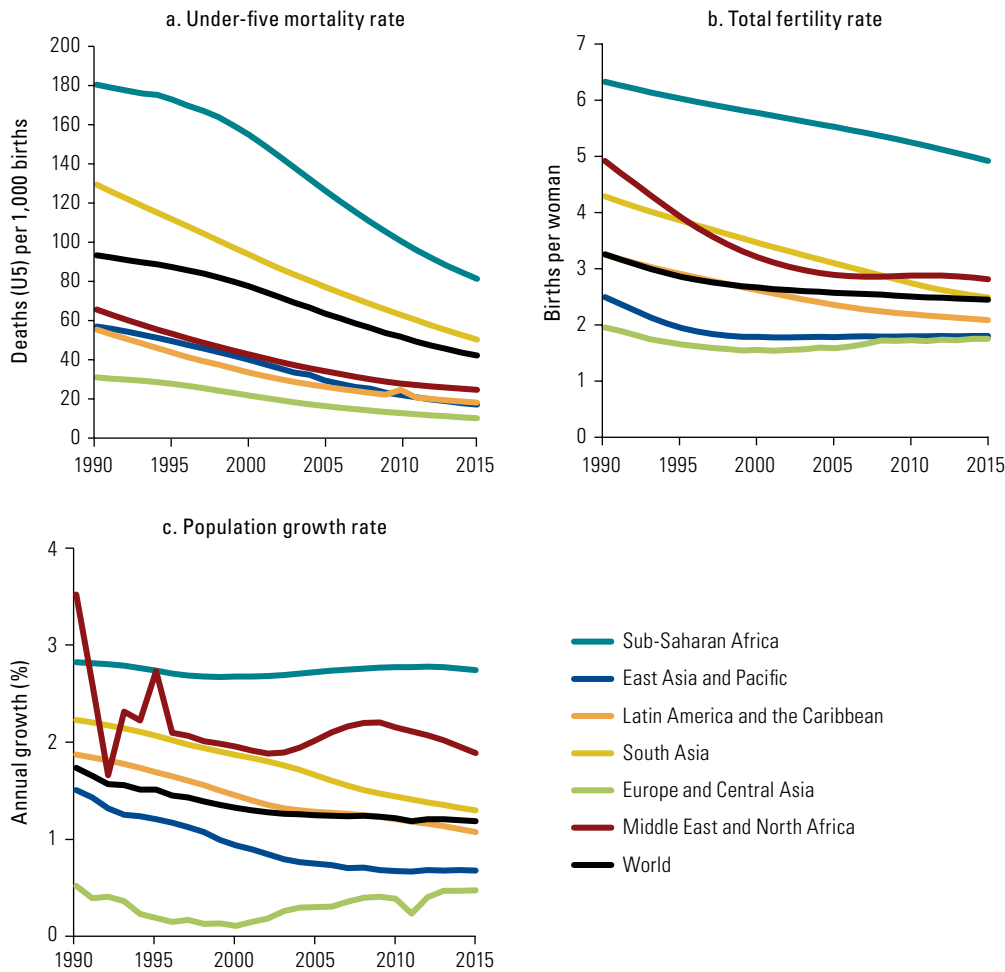
One such factor is the demographic structure of the household. In many parts of the world, the poor generally live in larger households and have more economically dependent members per working-age adult (Castaneda et al. 2016). In many regions of the world, the ratio of dependent household members to working-age adults is declining. However, this is not the case in Sub-Saharan Africa. Household surveys from the region show no appreciable decrease in average household size or in the dependency ratio over the 2000s (figure 1.10).

The good news of a declining under-5 mortality rate in Sub-Saharan Africa, and elsewhere in the world (figure 1.11, panel a), has combined with a relatively small drop in the total fertility rate to keep Sub-Saharan Africa's population growing at a higher rate than that of every other region in the world (figure 1.11, panels b and c) (Canning, Raja, and Yazbeck 2015; Groth and May 2017). Although poverty rates have declined slightly in

the region, the fast rate of population growth has led to the increase in the total population of poor people in Sub-Saharan Africa. These demographic features of the region will continue to pose a challenge for poverty reduction, a point that was anticipated by the first World Development Report on poverty (World Bank 1990).

A second contributing factor for the slow decline in poverty in Sub-Saharan Africa is that growth in this region has been less effective in reaching the poor than growth in other regions. One indicator of this is the region's low growth elasticity of poverty. For every percentage increase in GDP per capita, poverty in a typical non-African developing country falls by 2 percent, whereas in a typical African country it falls by only 0.7 percent (Christiaensen, Chuhan-Pole, and Sanoh 2013). There is a caveat to the elasticity comparison—the level of poverty is much higher in Sub-Saharan Africa so a smaller percentage change in a higher level can still be a significant reduction in poverty—but the general point is that growth in Sub-Saharan Africa has been less effective in reducing poverty than elsewhere. Some of the leading explanations for this ineffectiveness of growth in reducing poverty include the overall high levels

FIGURE 1.11 Under-5 Mortality Rate, Fertility Rate, and Population Growth Rate in Sub-Saharan Africa



Source: World Development Indicators (<http://databank.worldbank.org/data/source/world-development-indicators>).

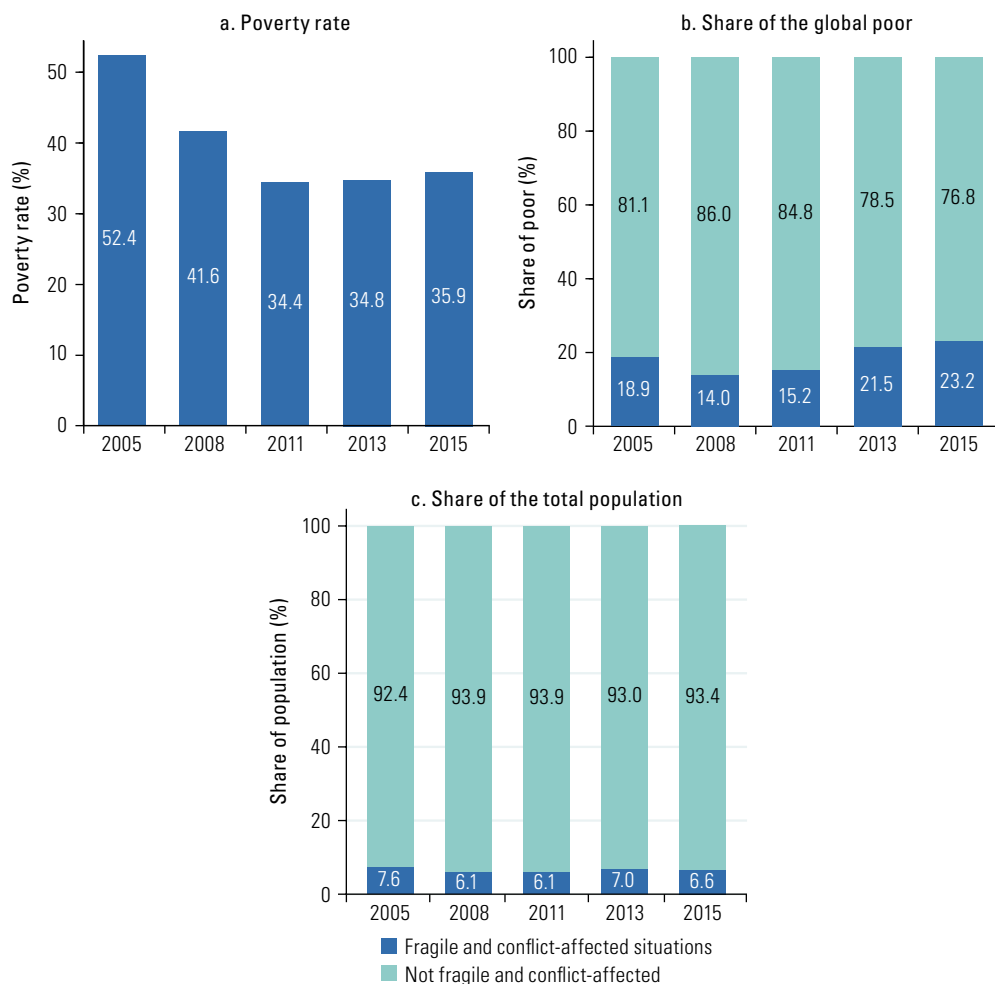
of inequality in several countries and growth that is predominantly in capital-intensive sectors like natural resource extraction.

As the global poverty rate declines, there is concern that extreme poverty will become a phenomenon increasingly associated with institutional fragility and conflict. It is also the case that most people (54 percent) living in fragile and conflict-affected situations (FCS) in 2015 are in Sub-Saharan Africa.⁹ To see if there is evidence that poverty is already beginning to pool in FCS, trends in the poverty rate and the share of the global poor living in fragile situations are analyzed.¹⁰ Figure 1.12, panel a, shows the poverty rate in economies in FCS from 2005 to 2015.¹¹

After falling sharply between 2005 and 2011, the poverty rate has since gone up: in 2015, the poverty rate in 35 economies in FCS was 35.9 percent, up from a low of 34.4 percent in 2011. The share of the global poor living in FCS has risen steadily since 2010, culminating in 23 percent of all poor people in 2015 (figure 1.12, panel b).¹²

This rise has not come about because populous countries have joined the ranks of fragile countries; except for a small drop between 2005 and 2008, the share of the world population living in fragile settings has stayed level through much of the period (figure 1.12, panel c). Were more countries to become fragile, the goal of rooting out global poverty would

FIGURE 1.12 Concentration of Absolute Poverty in Fragile and Conflict-Affected Situations



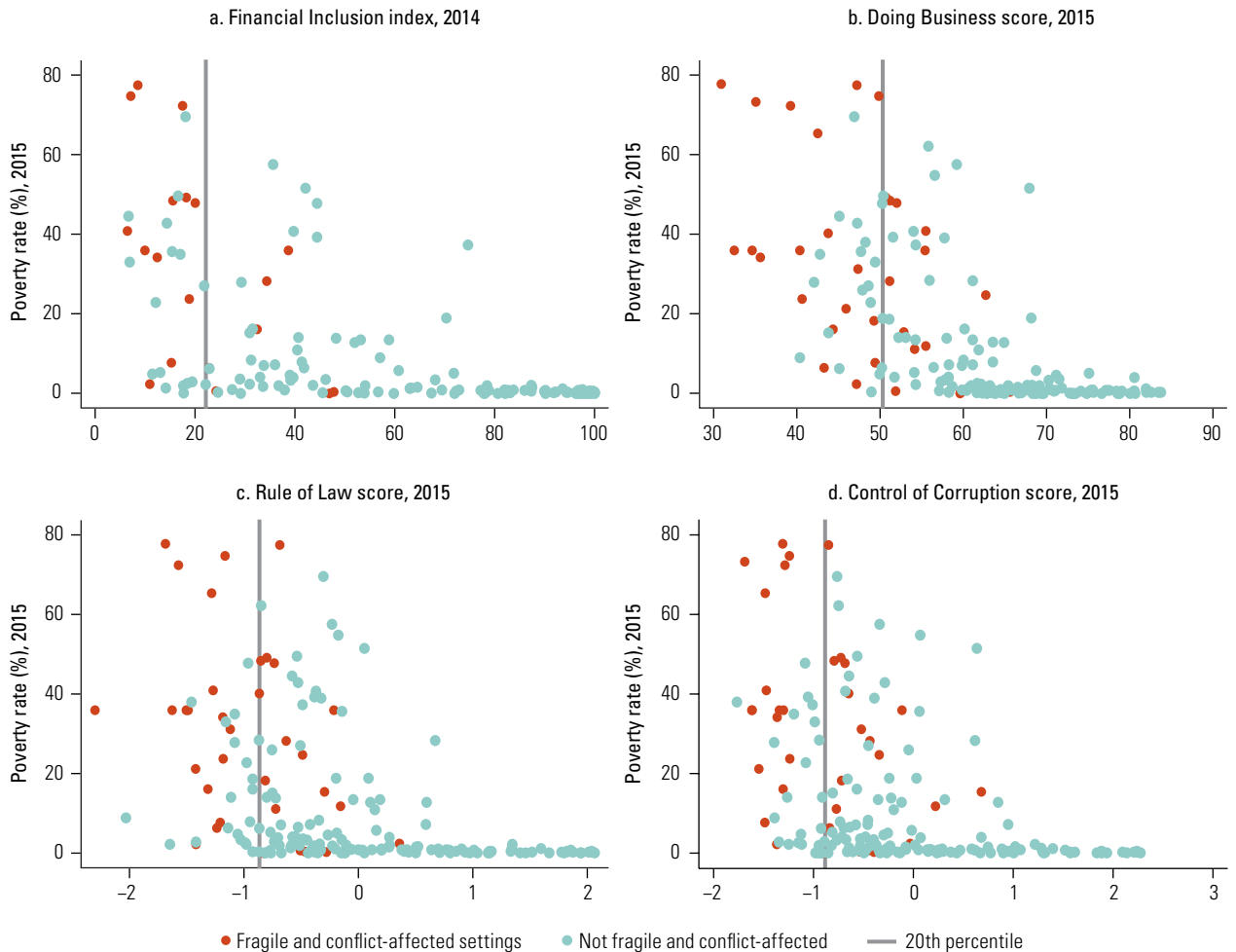
Source: PovcalNet (online analysis tool), World Bank, Washington, DC, <http://iresearch.worldbank.org/PovcalNet/>. Harmonized List of Fragile Situations (<http://www.worldbank.org/en/topic/fragilityconflictviolence/brief/harmonized-list-of-fragile-situations>)
 Note: See appendix A for more details on the list of countries in fragile and conflict-affected situations.

only get more challenging. Panels b and c together also reveal the “poverty burden” borne by the economies in FCS: they have 6.6 percent of the global population but 23 percent of the poor, which is 3.5 times higher than would be expected if poverty were equally prevalent everywhere. Despite this significant pooling of poverty, these estimates almost certainly undercount the extent of poverty in FCS for several reasons, including technical measurement reasons such as missing data on refugees and displaced persons (see appendix A).

Fragility comprises many elements, and countries that are in fragile situations are characterized by policy failures and institutional weaknesses in multiple dimensions

(World Bank 2017a).¹³ For illustration, figure 1.13 plots the performance of countries on a few fundamental indicators of economic and institutional quality against poverty rates. In general, there is a negative correlation between poverty rates and the strength of institutions; countries with high poverty rates have lower financial penetration (panel a; correlation = -0.59), poorer business climate (panel b; correlation = -0.62), weaker rule of law (panel c; correlation = -0.46), and higher perceived corruption (panel d; correlation = -0.43). Notably, fragile countries (marked in red) are often among the poorest performers in these areas, falling in the bottom quintile of the distribution. They must make signifi-

FIGURE 1.13 Fragile Countries Perform Poorly in Multiple Constituent Components of Fragility



Source: PovcalNet (online analysis tool), World Bank, Washington, DC, <http://iresearch.worldbank.org/PovcalNet>; The Global Findex Database (<https://globalfindex.worldbank.org/>); Doing Business (<http://www.doingbusiness.org/>); and Worldwide Governance Indicators (<http://info.worldbank.org/governance/wgi/index.aspx#home>).
 Note: Financial Inclusion Index is the proportion of individuals with a bank account in 2014. Doing Business indicator is the “Distance to Frontier” score for 2014. The 2015 Rule of Law Indicator and the Control of Corruption Indicator are drawn from the Worldwide Governance Indicators (WGI) project. These indicators are used as guideposts to set the World Bank’s CPIA ratings (<http://pubdocs.worldbank.org/en/600961531149299007/CPIA-Criteria-2017.pdf>).

cant progress on several constituent components of fragility simultaneously to relieve the constraints to economic growth and poverty reduction.

Socioeconomic and demographic profile of global poverty

To devise an appropriate poverty reduction strategy, it is not enough to merely know how many people are poor. In order to choose the right poverty reduction policies, place devel-

opment programs in proper locations, and target the beneficiary population accurately, it is critically important to know where the poor live, what conditions they live in, and how they earn a living. This description of the poor is frequently done within each country, informing country dialogue on how best to improve the well-being of the less well off in society. But researchers and policy makers can also learn a great deal by examining a global profile of the poor. This examination can aid the international development community to better target poverty alleviation

programs as well as areas of well-being requiring emphasis.

The profile of the poor is based on harmonized household surveys from 91 countries in the Global Monitoring Database (GMD).¹⁴ It is an update of a previous profile that was based on the harmonized data for 89 countries for 2013.¹⁵ The sample used for this profiling covers about 76 percent of the world's population and 86 percent of the extreme poor in 2015. The data demands for the global poverty profile are more stringent than that for the global poverty update. It requires harmonization of additional variables like age, gender, education, and sector of work from diverse household surveys, which is why the poverty profile is available for only a subset of countries and for an earlier date.

Globally, extreme poverty continues to be disproportionately and overwhelmingly rural. The poverty rate in rural areas (17.2 percent) is more than three times as high as that in urban areas (5.3 percent); with approximately 54 percent of the world's population, rural areas account for 79 percent of the total poor. Rural poverty is strongly associated with the sector of employment; the extreme poverty rate is higher among agricultural workers, and they constitute almost two-thirds of the extreme poor. But nonfarm employment does not guarantee an escape from poverty; a significant share of poor adults in both urban and rural areas is employed in nonagricultural sectors.

A stronger correlation is observed between poverty and educational achievement. Of the adults with no education, more than a fifth are in poverty. There is a premium to having had even some schooling: the poverty rate more than halves for adults with incomplete primary education, whereas poverty is all but absent among adults with some tertiary education. Given that intergenerational mobility in education is low in low- and middle-income countries, there is a danger that this pattern will carry over to the next generation as well (Narayan et al. 2018). Increasing labor productivity in agriculture and improving human capital to facilitate labor migration into high-productivity sectors and locations are key to poverty reduction.

The fertility rate is usually higher among the poor. As a result, poor households are usually large and have many children. There are on average 7.7 members and 3.5 children under the age of 14 in the world's extremely poor households. Just under a fifth of children under the age of 14 live in poverty, and, despite representing only about a quarter of the population, they make up more than two-fifths of the absolute poor (table 1.1). There is suggestion of increasing concentration of poverty among children, with children under the age of 14 constituting a marginally larger share of the poor in 2015 (45.7 percent) than in 2013 (44.2 percent).¹⁶ Children who grow up in poverty acquire less human capital because of inadequate or low-quality schooling and undernutrition. This makes childhood poverty especially pernicious because it perpetuates intergenerational poverty.

The current state of data limits the ability to understand the prevalence of poverty by gender and age. Household surveys collect information on total household consumption. They typically do not differentiate how resources are allocated within a household. For analytical purposes, it is assumed that all household members have equal needs and that total consumption is distributed equally within a household. The equal distribution assumption distorts the picture of poverty if there is inequality within households. For example, the profile shows that males and females are equally likely to be in poverty. Chapter 5 takes up this issue in detail and proposes methodological changes in house-

TABLE 1.1 Age and Gender Profile of the Poor, 2015

	Poverty rate (%)	Share of the poor (%)	Share of the population (%)
Age group			
0–14	19.3	45.7	27.4
15–24	11.7	16.9	16.6
25–34	9.4	13.0	15.9
35–44	8.7	10.1	13.4
45–54	6.4	6.4	11.6
55–64	5.9	4.2	8.2
65 and up	5.9	3.6	6.9
Total	11.5	100.0	100.0
Gender			
Male	11.7	50.3	49.6
Female	11.4	49.7	50.4

Source: Estimates based on the harmonized household surveys in 91 countries, circa 2015, GMD (Global Monitoring Database), Global Solution Group on Welfare Measurement and Capacity Building, Poverty and Equity Global Practice, World Bank, Washington, DC.

hold surveys to capture the intrahousehold distribution of consumption. In the meantime, differences in poverty by gender and age will be informed by assuming someone is poor if he or she lives in a poor household.

The poor lack not just income. Poverty also materializes as low educational attainment, poor health and nutrition outcomes, exposure to physical insecurity and natural hazards, and substandard living conditions. Globally, a large share of extreme poor households has no adult member with primary schooling, and in many households at least one child of school age (up to grade 8) is out of school (table 1.2). The poor are also poorly served in essential services like acceptable standards of drinking water, adequate sanitation facilities, and electricity (table 1.2).

Low levels of human capital and poor access to basic services undermine labor productivity of the poor, often their most important source of income, trapping them in income poverty. Increasingly, however, poverty is understood as encompassing more than just income. Sufficient education, good health, a safe living environment, and provision of basic services are desired for their intrinsic value, beyond their instrumental value in raising income. Chapter 4 takes a panoramic view of poverty as the inability to reach a sufficiency threshold in monetary terms as well as in a wide range of nonmonetary dimensions that directly affect an individual's well-being.

Conclusions

Between 1990 and 2015, the world made steady progress toward the target of reducing the number of people living in extreme poverty to less than 3 percent globally by 2030. The extreme poverty rate dropped on average 1 percentage point every year, falling from 35.9 percent in 1990 to 10.0 percent in 2015. As a result of this decline, there were well over a billion fewer people living in poverty despite a global population that had increased by more than 2 billion people during this period. With the estimated extreme poverty rate at 10 percent in 2015, the target of 3 percent by 2030 could be attained even if the rate of poverty reduction was cut in half. That is to say, if instead of continuing to de-

TABLE 1.2 Education and Access to Services Among Poor and Nonpoor Households

	Share of households (%)	
	Poor	Nonpoor
No adult member has completed primary education	53.1	12.2
At least one school-age child (up to grade 8) is out of school	22.8	3.4
Household does not have access to limited-standard source of drinking water	37.0	8.6
Household does not have access to limited-standard sanitation facilities	66.8	16.3
Household does not have access to electricity	67.8	7.1

Source: Estimates based on the harmonized household surveys in 119 countries, circa 2013, GMD (Global Monitoring Database), Global Solution Group on Welfare Measurement and Capacity Building, Poverty and Equity Global Practice, World Bank, Washington, DC.

cline by a percentage point a year the global poverty rate declined by half a percentage point a year, the world would still meet the 3 percent target. Despite this scope for the pace to significantly slacken, all forecasts for 2030 considered in this chapter that are based on countries or regions growing in line with their recent historic performance indicate that the world will fall well short of the target.

Part of the explanation for the deceleration in poverty reduction is that not all regions have shared in the global economic growth of the last quarter century, nor have all regions succeeded in ensuring that the poor have fully shared in the benefits of growth. Sub-Saharan Africa has had inadequate levels of growth and inadequate poverty reduction from growth, and this has resulted in the increase of the total number of people in this region living in extreme poverty. In 1990, 278 million people in Sub-Saharan Africa lived in extreme poverty; by 2015, this increased to an estimated 413 million people. Forecasts based on historic average growth rates predict that the number of people living in extreme poverty in the region will remain above 400 million in 2030.

A related reason why poverty reduction is slowing is that previously progress rested heavily on the success of the countries of East Asia and Pacific and South Asia in reducing the total number of people living in extreme poverty. The countries of East Asia and Pacific have experienced remarkable reductions in extreme poverty. In 1990, there were 987 million people living in extreme poverty in this region, and this num-

ber dropped to 47 million people by 2015. On average, each year ended with about 38 million fewer people living in extreme poverty in the East Asia and Pacific region. But now, with the prevalence of extreme poverty below 3 percent, and the number of poor in this region contributing only about 6 percent to the total population of poor, there are few remaining gains to be made in this region in terms of having a significant effect in reducing the global poverty rate.

Although there are still many extreme poor in South Asia, a similar story will most likely soon occur there, and this is good news. In 1990, more than a half billion people in South Asia lived in extreme poverty; by 2015, this dropped to 216 million people. A relatively large portion of the extreme poor still live in South Asia, but the forecasts indicate (combined with the anticipated change in how consumption is measured in India) that the total number of poor there is rapidly declining. The success in reducing extreme poverty in many regions of the world means that the majority of the remaining gains in poverty reduction must come from the countries of Sub-Saharan Africa.

The unevenness of the progress in global poverty reduction brings into focus the relative strengths and weaknesses in how progress toward the goal of a world free of poverty is monitored. In various forecasts assuming that countries continue to grow in line with their recent performance (or with the average historic growth rate of their region), av-

erage poverty rates in all regions of the world except for Africa are below 2 percent; however, the forecasted average extreme poverty rate for Sub-Saharan Africa is above 25 percent. Even in a forecast based on an assumed real growth rate of 8 percent, the 3 percent global target is met but extreme poverty in Sub-Saharan Africa is in double digits (13.4 percent).

This sort of outcome, where extreme poverty is eliminated throughout the world except in one region where it is in double digits certainly does not portray a picture of a world free of poverty. This, then, is one of the key messages of this report: it is time to go beyond the focus on bringing down the average global poverty rate to 3 percent to reach the goals of eradicating extreme poverty and ensure that all share in the benefits of economic development.

A key point of this report is that the view of poverty needs to be broadened. Now that the extreme poverty rate is less than 3 percent in half the countries of the world and is becoming increasingly concentrated, finishing the job will require constructing a more detailed and complete picture of what is meant by a world free of poverty. To do this, the next chapters in this report go beyond extreme income poverty to start the process of monitoring poverty *in all its forms*. New measures introduced in this report allow one to better monitor poverty in *all countries*, in *multiple aspects of life*, and for *all individuals* in every household.

Annex 1A

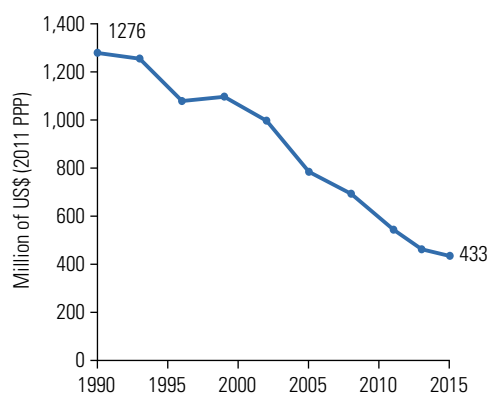
Historical global and regional poverty estimates

This annex contains tables of historical poverty rates at the global, regional, and country levels. Poverty rates do not speak to the distribution of poverty among the poor, meaning that the poor may fare worse in certain countries than in others. For this reason, the poverty rates are complemented with other measures of poverty: the poverty gap, the poverty gap divided by the poverty rate, and the squared poverty gap (Foster, Greer, and Thorbecke 1984).

The poverty gap measures the average distance to the poverty line, where people above the poverty line are given a distance of zero. This measure reflects both the share of poor and the average daily consumption of the poor, but expressed as the average shortfall *among the entire population*. If two countries have the same poverty rate, but the poor in the first country have a daily consumption of US\$1.50, whereas in the other they have a daily consumption of US\$1.80, then the poverty gap will indicate a higher depth of poverty in the first country. When the poverty gap is divided by the poverty rate, the resulting number shows the average distance to the poverty line, or average consumption shortfall among the poor. If the average consumption shortfall of the poor is 0.25, then poor individuals on average consume 25 percent less than the value of the IPL, or US\$1.43 per day $((1-0.25)*IPL)$.

Since 1990, both of these complementary measures of poverty have improved. The total consumption gap of the poor (the sum of all consumption shortfalls of the poor) shrank from US\$1,276 million (2011 PPP) in 1990 to US\$433 million (2011 PPP) in 2015 (figure 1A.1). This improvement reflects both that the share of people living in extreme poverty has decreased and that the average income of the poor has increased over this time interval.

FIGURE 1A.1 Global Total Consumption Gap of the Poor, 1990–2015



Source: PovcalNet (online analysis tool), World Bank, Washington, DC, <http://iresearch.worldbank.org/PovcalNet/>.

Note: PPP = purchasing power parity.

Although both the poverty gap and the poverty gap divided by the poverty rate are sensitive to the average level of poverty among the poor, they do not account for inequality among the poor. The squared poverty gap—which is the average squared distance to the poverty line, where people above the poverty line have a distance of zero—is sensitive to inequality among the poor. Suppose that two countries have the same poverty rate, and the poor in both countries on average consume US\$1.50 daily. Suppose further that, in one of the countries, all the poor consume US\$1.50, whereas the other country has many people consuming much less. The squared poverty gap measures this latter country, with greater inequality among the poor, as having a higher level of poverty.

An issue to keep in mind with these complementary poverty measures is that they are more sensitive to whether poverty is measured with consumption or income. Whereas

poverty estimates based on income can be zero—and even negative—in a given period because of negative income shocks, they rarely get close to zero when consumption is used. This makes it more likely that a country

using income is faring poorly in these complementary measures, and it makes it difficult to compare the depth of poverty across countries using consumption and income (see appendix A for more discussion on this).

TABLE 1A.1 Historical Global and Regional Extreme Poverty Trends, 1990–2015

a. World extreme poverty estimates, 1990–2015

Year	Poverty rate (%)	Poverty gap (%)	Squared poverty gap	Poor (millions)	Population (millions)
1990	35.9	12.7	6.1	1,894.8	5,284.9
1993	33.9	11.9	5.8	1,877.5	5,542.9
1996	29.4	9.8	4.7	1,703.2	5,792.6
1999	28.6	9.5	4.5	1,728.6	6,038.1
2002	25.6	8.3	3.9	1,609.9	6,276.8
2005	20.7	6.3	2.9	1,352.2	6,517.0
2008	18.1	5.4	2.4	1,223.2	6,763.7
2011	13.7	4.1	1.9	963.0	7,012.8
2013	11.2	3.4	1.6	804.2	7,182.9
2015	10.0	3.1	1.5	735.9	7,355.2

b. Regional poverty rates, 1990–2015

Percent

Region	1990	1993	1996	1999	2002	2005	2008	2011	2013	2015
East Asia and Pacific	61.6	54.0	41.1	38.8	29.9	19.1	15.1	8.6	3.6	2.3
Europe and Central Asia	2.9 ^a	5.0	7.2	7.8	5.9	4.9	2.8	2.1	1.6	1.5
Latin America and the Caribbean	14.2	13.2	13.8	13.6	11.8	9.9	6.9	5.6	4.6	4.1
Middle East and North Africa	6.2	6.7	5.8	3.8	3.2	3.0	2.7	2.7	2.6	5.0
South Asia	47.3	44.9	40.3	39.3 ^a	38.6	33.7	29.5	19.8	16.2	12.4 ^a
Sub-Saharan Africa	54.3	58.9	58.2	57.7	56.4	50.7	47.8	45.1	42.5	41.1
Sum of regions	43.1	40.6	35.1	34.0	30.4	24.5	21.3	16.1	13.1	11.6
Rest of the world	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.7
World	35.9	33.9	29.4	28.6	25.6	20.7	18.1	13.7	11.2	10.0

c. Regional number of extreme poor, 1990–2015

Millions

Region	1990	1993	1996	1999	2002	2005	2008	2011	2013	2015
East Asia and Pacific	987.1	902.0	712.9	695.9	552.5	361.6	292.8	169.6	73.1	47.2
Europe and Central Asia	13.3 ^a	23.4	33.8	36.7	27.6	22.9	13.3	9.8	7.7	7.1
Latin America and the Caribbean	62.6	61.3	67.7	69.7	63.2	54.9	39.9	33.8	28.0	25.9
Middle East and North Africa	14.2	16.6	15.3	10.6	9.4	9.4	8.8	9.2	9.5	18.6
South Asia	535.9	542.1	518.0	534.4 ^a	554.3	510.4	467.0	328.0	274.5	216.4 ^a
Sub-Saharan Africa	277.5	327.3	350.7	376.1	398.0	387.7	396.4	406.4	405.1	413.3
Sum of regions	1,890.5	1,872.7	1,698.3	1,723.5	1,605.0	1,346.9	1,218.1	956.9	797.8	728.5
Rest of the world	4.3	4.9	4.9	5.0	4.9	5.3	5.1	6.2	6.4	7.3
World	1,894.8	1,877.5	1,703.2	1,728.6	1,609.9	1,352.2	1,223.2	963.0	804.2	735.9

Source: PovcalNet (<http://iresearch.worldbank.org/PovcalNet/>), World Bank.

Note: Sum of regions was previously referred to as *developing world*.

a. This estimate is based on a regional population coverage of less than 40 percent. The criterion for estimating survey population coverage is whether at least one survey used in the reference year estimate was conducted within two years of the reference year.

TABLE 1A.2 Poverty Estimates, by Economy, 2015

Economy	Survey year(s) of the poverty estimate	Number of poor (millions)	Pov. rate (%)	Pov. gap (%)	Pov. gap/Pov. rate (%)
Albania	2012	0.0	0.9	0.2	20.0
Algeria	2011.17	0.1	0.4	0.1	37.1
Angola	2008.5	7.8	27.9	8.7	31.2
Argentina	2014 and 2016	0.3	0.6	0.3	45.3
Armenia	2015	0.1	1.9	0.4	18.8
Australia	2010	0.1	0.5	0.3	62.0
Austria	2015	0.1	0.8	0.5	72.0
Azerbaijan	2005	0.0	0.0	0.0	
Bangladesh	2010 and 2016	24.4	15.2	2.8	18.1
Belarus	2015	0.0	0.0	0.0	
Belgium	2015	0.0	0.0	0.0	
Belize	1999	0.0	13.9	6.0	43.1
Benin	2015	5.2	49.6	22.4	45.1
Bhutan	2012 and 2017	0.0	1.7	0.3	16.3
Bolivia	2015	0.7	6.4	2.8	44.3
Bosnia and Herzegovina	2015	0.0	0.2	0.1	30.0
Botswana	2009.25	0.3	12.8	3.7	29.3
Brazil	2015	6.9	3.4	1.2	34.5
Bulgaria	2014	0.1	1.2	0.5	36.3
Burkina Faso	2014	7.8	42.8	10.8	25.2
Burundi	2013.5	7.6	74.7	32.9	44.0
Cabo Verde	2007.33	0.0	7.2	1.7	23.0
Cameroon	2014	5.2	22.8	7.1	31.3
Canada	2013	0.2	0.5	0.2	32.0
Central African Republic	2008	3.5	77.7	44.0	56.6
Chad	2011	4.8	34.1	13.2	38.7
Chile	2015	0.2	1.3	0.8	58.5
China	2015	10.0	0.7	0.2	21.9
Colombia	2015	2.2	4.5	1.7	38.2
Comoros	2013.5	0.1	18.2	6.5	35.7
Congo, Dem. Rep.	2012.4	55.1	72.3	34.6	47.9
Congo, Rep.	2011	1.7	34.9	13.5	38.7
Costa Rica	2015	0.1	1.5	0.6	38.8
Côte d'Ivoire	2015	6.5	28.2	9.1	32.4
Croatia	2015	0.0	0.8	0.4	46.7
Cyprus	2015	0.0	0.0	0.0	
Czech Republic	2015	0.0	0.0	0.0	
Denmark	2015	0.0	0.2	0.1	57.1
Djibouti	2013	0.2	18.6	6.3	33.9
Dominican Republic	2015	0.2	1.9	0.5	25.5
Ecuador	2015	0.6	3.4	1.2	35.8
Egypt, Arab Rep.	2015	1.3	1.4	0.2	11.9
El Salvador	2015	0.1	1.9	0.4	20.7
Estonia	2015	0.0	0.5	0.4	78.7
Eswatini	2009.25	0.5	39.0	14.8	37.9
Ethiopia	2010.5 and 2015.5	27.0	27.0	7.7	28.6
Fiji	2013.24	0.0	1.0	0.2	16.7
Finland	2015	0.0	0.0	0.0	
France	2015	0.0	0.0	0.0	
Gabon	2005 and 2017	0.1	4.1	1.0	24.1
Gambia, The	2010.08 and 2015.31	0.2	11.1	2.5	22.9
Georgia	2015	0.1	4.0	1.0	24.7
Germany	2015	0.0	0.0	0.0	
Ghana	2012.8	3.0	10.9	3.1	28.7
Greece	2015	0.2	1.5	0.8	52.7
Guatemala	2014	1.3	7.9	2.3	29.3
Guinea	2012	4.0	33.0	9.4	28.4
Guinea-Bissau	2010	1.2	65.3	29.4	44.9

(continued)

TABLE 1A.2 Poverty Estimates, by Economy, 2015 *(continued)*

Economy	Survey year(s) of the poverty estimate	Number of poor (millions)	Pov. rate (%)	Pov. gap (%)	Pov. gap/Pov. rate (%)
Guyana	1998	0.1	6.5	1.9	28.9
Haiti	2012	2.5	23.7	7.6	32.1
Honduras	2015	1.4	16.2	5.6	34.9
Hungary	2015	0.0	0.5	0.3	61.2
Iceland	2014	0.0	0.0	0.0	
India*	2011.5	175.7	13.4	2.4	17.7
Indonesia	2015	18.5	7.2	1.2	16.6
Iran, Islamic Rep.	2014	0.3	0.4	0.1	16.2
Iraq	2012	0.8	2.2	0.3	14.8
Ireland	2015	0.0	0.2	0.2	95.7
Israel	2012	0.0	0.5	0.3	54.2
Italy	2015	1.2	2.0	1.4	70.5
Jamaica	2004	0.1	1.8	0.4	22.8
Japan	2008	0.3	0.2	0.2	68.2
Jordan	2010.24	0.0	0.2	0.0	16.7
Kazakhstan	2015	0.0	0.0	0.0	
Kenya	2005.38 and 2015.67	17.6	37.3	11.9	31.9
Kiribati	2006	0.0	11.8	3.0	25.4
Korea, Rep.	2012	0.1	0.3	0.1	44.0
Kosovo	2015	0.0	0.4	0.1	20.0
Kyrgyz Republic	2015	0.2	2.5	0.5	18.5
Lao PDR	2012.25	0.9	14.0	2.9	20.7
Latvia	2015	0.0	0.7	0.4	47.3
Lebanon	2011.77	0.0	0.0	0.0	
Lesotho	2010	1.2	54.8	28.1	51.3
Liberia	2014	1.8	40.2	12.3	30.7
Lithuania	2015	0.0	0.8	0.5	72.0
Luxembourg	2015	0.0	0.2	0.2	95.0
Macedonia, FYR	2014	0.1	5.0	2.4	47.2
Madagascar	2012	18.8	77.5	38.8	50.1
Malawi	2010.23	12.2	69.6	31.7	45.6
Malaysia	2013 and 2015.33	0.0	0.0	0.0	
Maldives	2009.5	0.0	4.1	0.8	20.3
Mali	2009.89	8.3	47.8	14.5	30.4
Malta	2015	0.0	0.0	0.0	
Mauritania	2014	0.3	6.2	1.5	23.9
Mauritius	2012	0.0	0.4	0.1	17.5
Mexico	2014 and 2016	4.2	3.3	0.8	24.4
Micronesia, Fed. Sts.	2013	0.0	15.4	5.5	35.9
Moldova	2015	0.0	0.0	0.0	
Mongolia	2014 and 2016	0.0	0.2	0.0	10.0
Montenegro	2014	0.0	0.0	0.0	
Morocco	2013.5	0.3	0.9	0.2	17.4
Mozambique	2014.44	17.4	62.2	27.3	43.8
Myanmar	2015	3.3	6.4	1.5	23.1
Namibia	2009.54 and 2015.27	0.3	13.4	4.5	33.8
Nepal	2010.17	2.0	7.0	1.4	19.8
Netherlands	2015	0.0	0.0	0.0	
Nicaragua	2014	0.2	2.9	0.6	22.3
Niger	2014	8.9	44.5	13.5	30.2
Nigeria	2009.83	86.5	47.8	18.6	38.9
Norway	2015	0.0	0.2	0.0	16.7
Pakistan	2013.5 and 2015.5	9.9	5.2	0.7	13.2
Panama	2015	0.1	2.0	0.5	26.8
Papua New Guinea	2009.67	2.3	28.4	10.3	36.3
Paraguay	2015	0.1	1.9	0.4	21.7
Peru	2015	1.1	3.6	1.0	27.3

(continued)

TABLE 1A.2 Poverty Estimates, by Economy, 2015 (continued)

Economy	Survey year(s) of the poverty estimate	Number of poor (millions)	Pov. rate (%)	Pov. gap (%)	Pov. gap/Pov. rate (%)
Philippines	2015	8.5	8.3	1.6	18.9
Poland	2015	0.0	0.0	0.0	
Portugal	2015	0.1	0.5	0.3	50.0
Romania	2015	1.1	5.7	1.9	33.4
Russian Federation	2015	0.0	0.0	0.0	
Rwanda	2013.75	6.0	51.5	17.6	34.2
Samoa	2008	0.0	1.1	0.1	10.5
São Tomé and Príncipe	2010	0.1	26.0	6.2	24.0
Senegal	2011.29	5.3	35.7	11.4	31.9
Serbia	2015	0.0	0.1	0.0	30.0
Seychelles	2013	0.0	1.0	0.4	40.6
Sierra Leone	2011	3.5	48.4	14.8	30.5
Slovak Republic	2015	0.0	0.7	0.3	35.1
Slovenia	2015	0.0	0.0	0.0	
Solomon Islands	2013	0.1	24.7	6.7	26.9
South Africa	2014.83	10.4	18.9	6.2	32.8
South Sudan	2009	8.7	73.3	40.0	54.6
Spain	2015	0.5	1.0	0.6	64.6
Sri Lanka	2012.5 and 2016	0.2	0.8	0.1	11.7
St. Lucia	1995	0.1	28.3	9.8	34.6
Sudan	2009	3.0	7.7	2.0	25.8
Suriname	1999	0.1	18.8	14.5	77.0
Sweden	2015	0.0	0.5	0.3	50.0
Switzerland	2015	0.0	0.0	0.0	
Syrian Arab Republic	2004	4.0	21.2	4.8	22.4
Tajikistan	2015	0.4	4.8	1.1	21.8
Tanzania	2011.77	21.9	40.7	11.7	28.9
Thailand	2015	0.0	0.0	0.0	33.3
Timor-Leste	2014	0.4	31.2	6.9	22.0
Togo	2015	3.6	49.2	19.9	40.5
Tonga	2009	0.0	1.0	0.2	21.4
Trinidad and Tobago	1992	0.0	0.6	0.2	35.7
Tunisia	2010.41	0.1	0.9	0.2	18.3
Turkey	2015	0.2	0.3	0.1	21.4
Turkmenistan	1998	0.2	2.8	0.4	15.5
Tuvalu	2010	0.0	2.4	0.2	6.8
Uganda	2012.45 and 2016.5	15.8	39.2	12.3	31.2
Ukraine	2015	0.1	0.1	0.0	8.3
United Kingdom	2015	0.1	0.2	0.1	39.1
United States	2013 and 2016	3.7	1.2	1.0	82.8
Uruguay	2015	0.0	0.1	0.0	23.1
Uzbekistan	2003	4.4	14.0	3.8	26.8
Vanuatu	2010	0.0	12.8	3.2	24.7
Venezuela, RB	2006	2.8	8.9	6.6	74.7
Vietnam	2014 and 2016	2.1	2.3	0.4	19.1
West Bank and Gaza	2011 and 2016.75	0.0	0.6	0.1	15.3
Yemen, Rep.	2014	11.0	40.9	12.0	29.3
Zambia	2015	9.3	57.5	29.5	51.3
Zimbabwe	2011	2.5	16.0	3.5	21.5

Source: PovcalNet (<http://iresearch.worldbank.org/PovcalNet/>), World Bank.

Note: The year column refers to the year of the survey that is used to calculate the 2015 estimate as listed in PovcalNet. Note that for economies that use EU-SILC surveys, the survey year is 2016, but the year listed is 2015 because the 2016 survey contains income data for 2015. If one year is listed, and this year is different from 2015, the poverty estimate from the year of the survey has been extrapolated to 2015. If two years are listed, the 2015 estimates are based on interpolations between these two surveys. For more information on how these interpolations and extrapolations are carried out, see appendix A. The decimal year notation is used when data are collected over two calendar years. The number before the decimal point refers to the first year of data collection, while the numbers after the decimal point show the proportion of data collected in the second year. For example, the Algerian survey (2011.17) was conducted in 2011 and 2012, with 17 percent of the data collected in 2012. Pov. rate is the poverty rate, or the percentage of the population living on less than the IPL (international poverty line). Pov. gap is the average consumption shortfall of the population where the nonpoor have no shortfall (as described above). Pov. gap / pov. rate is the average consumption shortfall of the poor (as described above). * indicates that the 2015 estimate for India is based on an imputation described in box 1.3.

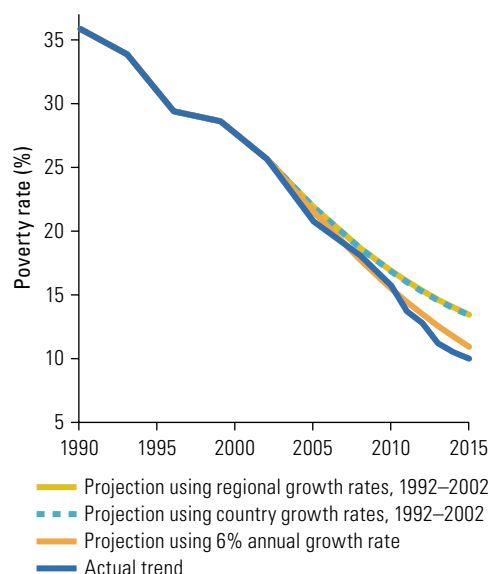
Annex 1B

Validation check of the 2030 poverty projections

The poverty projections to 2030 are based on several critical assumptions regarding countries' future growth rates and the nature of this growth. The global poverty patterns in 2030 may look very different if these assumptions are not met. The soundness of the 2030 forecasts can be assessed indirectly by pretending that the poverty levels and growth rates from 2002–15 are unknown and applying the forecast methodology to 2002–15. For example, one can use the country-specific and regional growth rates from 1992 to 2002 to predict poverty rates from 2002 to 2015. With this approach, the 2015 forecasts can be benchmarked against the realized poverty levels in 2015. This would help uncover the sensitivity of the assumptions behind the projections and hence give an indication of the uncertainty surrounding the 2030 projections.

Using this approach, the global rate of extreme poverty is predicted to be 13.4 percent in 2015—well above the actual rate of 10.0 percent (figure 1B.1). This is largely because the regional growth rates in Sub-Saharan Africa are severely underestimated using historical growth data.¹⁷ The regional growth rate in GDP per capita in Sub-Saharan Africa from 1992 to 2002 was 0.7 percent, whereas the actual growth in GDP per capita from 2002 to 2015 turned out to be several percentage points higher. Hence, the historical growth rates were not a good indication of the future growth rates, and the projections overestimate the amount of poverty in Sub-Saharan Africa in 2015. In other regions, such as East Asia and Pacific and South Asia, the projections are very close to

FIGURE 1B.1 Global Poverty Projections, 2002–15



Source: PovcalNet (<http://iresearch.worldbank.org/PovcalNet/>), World Bank.

Note: The figure assumes 2002 is the latest year of data and applies the forecasting methods used toward 2030 to obtain poverty “forecasts” for 2002–15. This can be benchmarked against realized poverty levels, and hence allows for an assessment of the soundness of the 2030 projections.

the actual poverty levels in 2015. To match the actual global poverty rate observed in 2015, the 2002–15 projections would need to use annual growth rates in the range of 6 percent per year.

Although this example speaks to the inherent uncertainty of making long-term poverty projections, even with an annual growth rate across the globe of 6 percent until 2030, the projections still do not predict that the 3 percent target will be met.

Notes

1. The interim target of a poverty rate of 9 percent was set by the World Bank Group president at the 2013 Annual Meetings: <http://www.world-bank.org/en/news/speech/2013/10/11/world-bank-group-president-jim-yong-kim-speech-annual-meetings-plenary>.
2. Survey coverage is assessed by considering surveys within a two-year window on either side of 2015, that is, surveys conducted between 2013 and 2017. By this criterion, two-thirds of the world is covered by a survey for the 2015 poverty update. The coverage would be lower for more recent years.
3. The core poverty numbers reported in this chapter are for 2015. These numbers are referred to as estimates. References to a nowcast indicate that the poverty rate is a forecasted estimate up to the current point in time, which for this report is 2018. Because this relies largely on realized growth rates and population figures, it should, in principle, be more reliable than a forecast. References to forecasts are used when the prediction is more remote in the future, later than the nowcast, typically 2030. Forecasts are based on assumed growth rates and predictions of population figures and are estimated with significantly less precision.
4. The growth rates used are from the World Development Indicators. Pass-through rates are essentially estimated by comparing average differences between national accounts and household surveys. The mean national consumption or income from each country's household survey is compared with either GDP or household final consumption expenditure (HFCE) from national accounts. HFCE is the preferred measure in most countries, except in Sub-Saharan Africa where GDP is used for estimating pass-through factors and growth rates. If GDP and HFCE data are unavailable, growth forecasts from the Global Economic Prospects are used. If these are also unavailable, growth forecasts from the World Economic Outlook are used. For Syria, no estimates are available in these sources. Instead, data from the *Economist's* Intelligence Unit are relied upon. The fraction of GDP/HFCE per capita that is assumed to pass through to the welfare vector is as follows: 0.785 for East Asia and Pacific, 0.773 for Europe and Central Asia, 0.829 for Latin America and the Caribbean, 0.544 for the Middle East and North Africa, 0.912 for South Asia, 0.748 for Sub-Saharan Africa, and 0.892 for the rest of the world.
5. GDP rates are used for Sub-Saharan Africa and for countries without HFCE growth rates. The same pass-through rates are applied as in the nowcast. The average regional growth rate is weighted using each country's population in 2015 as the weight.
6. Projections based on a global growth rate of 8 percent and no shared prosperity premium are nearly identical to the 6 percent growth and 2 percentage point premium scenario, and thus also get the global rate below 3 percent by 2030. In general, a mean growth rate of x percent combined with a shared prosperity premium of y percent is nearly identical to a growth rate of $x + y$ percent and no shared prosperity premium. Projections using a 7 percent global growth rate and no shared prosperity premium, or a 5 percent growth rate and a 2-percentage-point premium, get very close to the 3 percent target.
7. East Asia and Pacific (6.4 percent), Latin America and the Caribbean (3.5 percent), the Middle East and North Africa (2.5 percent), Europe and Central Asia (1.0 percent), and the rest of the world (1.0 percent).
8. Some evidence suggests that, if price differences within countries are accounted for, the reduction in Sub-Saharan Africa has been greater than the numbers suggested here (Beegle et al. 2016). For more information on the impact of price differences within countries on poverty, see appendix A.
9. Of the 35 economies in FCS in 2015, 16 (45.7 percent) were in Sub-Saharan Africa. In terms of population, of the 481.1 million people living in FCS, 259.8 million (54.0 percent) were in Sub-Saharan Africa. More details on how countries are determined to be in FCS are given in appendix A.
10. The analysis uses a "rolling" roster of fragile countries, that is, the set of fragile countries can change from one year of the analysis to the next.
11. This analysis goes back only to 2005 because the World Bank classification of fragile countries began that year.
12. The aggregate FCS poverty rate is the population-weighted mean of the poverty

rates of all economies in FCS. The number of poor is a product of the FCS poverty rate and the total population living in FCS. This leads to a slightly higher estimate of the total number of poor (744 million versus PovcalNet estimate of 736 million), but the discrepancy is inconsequential to the current discussion.

13. The World Bank's definition of fragility is based on the Country Policy and Institutional Assessment (CPIA), which assesses the conduciveness of a country's policies and institutions to poverty reduction, sustainable growth, and the effective use of development assistance. The CPIA comprises 16 indicators clustered in four dimensions: economic management, structural policies, policies for social inclusion and equity, and public sector management and institutions.
14. Please refer to appendix A for more information on the GMD.
15. The 2013 profile and the methodological details are reported in Castaneda et al. (2016).
16. The 2013 estimates are based on a different set of 89 countries (Castaneda et al. 2016). When the 2013 profiling is repeated using the same 91 countries from 2015, children constitute 44.9 percent of the poor.
17. Another reason for the discrepancy is that the projections used here assume that only a fraction of the growth rates observed in national accounts translates into growth in the consumption aggregate observed in surveys. The actual poverty numbers, in contrast, assume that all growth observed in national accounts translates into growth in the consumption aggregate. This implies that the projections are more pessimistic than the actual estimates for countries where the 2015 estimate is based on extrapolation.