3

Higher Standards for a Growing World

This chapter presents two new sets of monetary poverty lines intended to complement the international poverty line (IPL) of US$1.90 a day. First, two higher poverty lines, at US$3.20 and US$5.50 per day, are presented, reflecting typical national poverty thresholds in middle-income countries. Second, the chapter introduces a global societal poverty line (SPL) reflecting how monetary definitions of poverty at the national level vary with the overall income in a society. The SPL counts individuals as poor if they are living either on less than the IPL or on less than US$1.00 a day plus half the median value of consumption or income of their nation.

The two sets of complementary poverty lines enrich our understanding of global monetary poverty. They reveal that global poverty rates are higher and being reduced more slowly than is indicated by assessments using the IPL. Although only 10 percent of the world population was living on less than US$1.90 per person per day in 2015, a quarter of the world was living on less than US$3.20 per person per day, and close to half the world was living on less than US$5.50 per person per day. The societal poverty rate declined by about a third between 1990 and 2015, dropping from approximately 45 percent to 28 percent. The chapter shows that the elimination of monetary poverty, more broadly defined, is still a distant goal.

Introduction

In 2013, the World Bank set a target of reducing extreme poverty as assessed by the international poverty line (IPL) to less than 3 percent of the global population by 2030. A frequent and important question posed when monitoring progress toward the goal of ending poverty is whether the IPL, currently valued at US$1.90 in 2011 purchasing power parity (PPP) U.S. dollars, is too severe a threshold for defining whether someone is poor or not. Or, is US$1.90 per day really enough to live a life free of extreme poverty?

One element of the answer involves examining the reason this amount was initially selected. The value of the IPL was derived from a set of national poverty lines—lines that reflected social and economic assessments made in each country of how much someone needs to meet basic needs and live a life free of poverty. These national poverty lines came from some of the poorest countries in the world, and the US$1.90 value was an average of national poverty lines from 15 of these very poor countries (Ferreira et al. 2016). The inference is that, if US$1.90 defines the cost of basic needs in some of the poorest countries of the world, then it can be viewed as an absolute minimum threshold for defining poverty in all countries. This approach for setting the IPL is therefore guided by decisions made in some of the poorest countries of the world and, in this way, respectful of national values and choices.

In addition to reflecting national values and choices, the IPL also has the desirable

attribute that it is fixed in real terms over time and across countries. The value of the line will be regularly adjusted to reflect changing prices over time so that it maintains a constant value through 2030 in each country of the world. Fixing the real value of the IPL in this way ensures that the 3 percent by 2030 target will not be shifted to make it easier or more difficult to reach.

Additionally, the value of the IPL is converted into local currencies using the 2011 PPP index to lock in corresponding amounts of each local currency that can purchase approximately the same amount of basic goods within each country. Uniformity in purchasing power across countries is desirable because it guarantees that the yardstick of material well-being used in each country is comparable with the yardsticks used in all other countries. The comparable value of the line makes certain that, if individuals are identified as poor in one country because they are not able to acquire a basic bundle of goods, they would also be identified as poor in other countries if unable to purchase a similarly valued bundle of goods.

"Measurable, time-bound goals are crucial to focusing our work," explains World Bank President Jim Yong Kim (2016). The decision to fix the purchasing power of the IPL over time (up through 2030), and over all countries of the world, ensures that the goal line for this time-bound target is not changed.

All of these attributes of the IPL have been persuasive in helping the global community reach agreement around the poverty goal. The success of the IPL in fostering coordination in the international community on the issue of poverty is evident in the incorporation of the IPL in first the Millennium Development Goals (MDGs) and now the Sustainable Development Goals (SDGs).[1]

Although the World Bank will continue to focus on the 3 percent target as assessed by the IPL, there are, nonetheless, reasonable concerns with the current valuation of the IPL. One source of concern is simply that, when those national poverty lines were constructed for the 15 poor countries, 60 percent of the global population was living in low-income countries. The average value of these national poverty lines was meaningful for the vast majority of the poor and a large portion of the global population. By 2015, however, only 9 percent of the global population was living in low-income countries (Fantom and Serajuddin 2016). Because most of the extreme poor are now living in middle-income countries, and most of the total population is in middle- and high-income countries, the use of average assessments of basic needs in low-income countries is gradually becoming less relevant in many countries of the world.

To address this concern in part, the World Bank has introduced a new set of poverty lines that are higher in value and more relevant to current economic conditions. Looking beyond the IPL helps us better understand what poverty means in different parts of the world. This chapter discusses two ways in which the World Bank will now also report on poverty, by assessing complementary poverty lines that will help guide efforts to deliver on the broader objective of establishing a world free of poverty.

Higher poverty lines for everyone: US$3.20 and US$5.50 a day

Although maintaining the value of the IPL fixed in real terms is essential to monitoring progress toward achieving the 2030 poverty target, recognizing that how countries and the global community define poverty and basic needs can change is also imperative. "The necessities of life are not fixed" argues Townsend (1979, 915). "They are continuously being adapted and augmented as changes take place in society and its products."

To address the concern that the value of the IPL could be viewed as too extreme for much of the world or that the necessities of life are greater now than previously, the World Bank also uses poverty lines that are higher in value. The values of these lines have been identified in a manner similar to the IPL, that is, they reflect social and economic assessments made by governments; however, the assessments are more recent, and they are also produced in countries that are, on average, richer than those upon which the IPL is based.

These complementary lines reflect typical poverty assessments in lower-middle-income countries (LMICs) and upper-middle-income countries (UMICs) in recent years.[2] Specifically, the lines are the median values of LMIC and UMIC national poverty lines in about 2011 (Jolliffe and Prydz 2016). The value of the poverty line based on assessments of needs in LMICs is US$3.20 per person per day expressed in 2011 PPP U.S. dollars, whereas the value of the line based on typical basic needs in UMICs is US$5.50 (table 3.1). Although these lines may sometimes be referred to as LMIC and UMIC lines, this does not mean that, for example, the LMIC line can be applied only in the case of LMICs. The two poverty lines simply offer higher values that reflect assessments of basic needs in these two groups of countries. (The values are based on a large database of harmonized national poverty lines in about 2011; see appendix A for details.)

As with the IPL, the intention is that the value of these LMIC and UMIC lines will remain fixed in real terms, thereby allowing poverty reduction to be monitored also at higher global poverty lines.[3] Because they are complementary lines based on more recent social assessments of basic needs, the lines will maintain greater relevance as poverty reduction is monitored over the next 15 years. The decision to use social assessments from middle-income countries also reflects the overall growth in the global economy. Using LMIC and UMIC median national poverty lines as the basis for the complementary lines means that these new lines better reflect the situations in countries that are home to most of the global population and most of the global poor.

Chapter 1 in this report shows the tremendous progress the world has made in reducing extreme poverty as measured by the IPL. As one remarkable example, target 1.A of MDG 1, to cut the poverty rate of 1990 in half by 2015, was reached approximately six years ahead of schedule. This is true whether we examine the global poverty rate or the global poverty rate less several high-income countries. This extraordinary success allows us to broaden our focus to ensure that those people who may not be poor as measured by the IPL, but who struggle nonetheless to satisfy their basic needs, also benefit from economic development.

TABLE 3.1 National Poverty Lines, circa 2011

Economy, income classification	Median	Mean
Low income	1.90	2.20
Lower-middle income	3.20	3.90
Upper-middle income	5.50	5.60
High income	21.70	21.20

Source: Jolliffe and Prydz 2016.
Note: Values are rounded to nearest 0.10. Economies are classified on the basis of official World Bank income classifications, which rely on measures of per capita gross national income. Estimates are based on national poverty lines in 126 economies. The selected poverty line for each economy is the one that is closest in time to 2011.

Table 3.2 shows the change since 1990 in the proportion of people living on less than US$3.20 or less than US$5.50 a day. The findings illustrated in the table suggest that the success in reducing extreme poverty has not been completely matched by reductions in the relative size of the population living on less than these higher-valued lines. Like the MDG of halving extreme poverty as measured by the IPL, the proportion of people living on less than US$3.20 a day was also halved between 1990 and 2015. However, in contrast to the MDG, which was met about six years ahead of schedule, the proportion of people living on less than US$3.20 was only halved by 2014, five years after the MDG target was reached. Measured according to the US$5.50 line, the success in improving the well-being of people living in poverty must be additionally tempered. In 1990, approximately two-thirds of the population of the world was living on less than US$5.50 a day. By 2015, this proportion had fallen, but it had not been halved. Slightly less than half (46 percent) of the world was still living on less than US$5.50 a day in 2015.

Figure 3.1, panel a, illustrates why the rate at which extreme poverty is being reduced is not matched by reductions in the share of the world population living on less than US$3.20 or US$5.50. In 1990, there was a concentration of people who were consuming just less than the US$1.90 threshold, as revealed by the distribution peaking to the left of this value.[4] Although one-third of the world's population consumed less than US$1.90, most of those people consumed at rates between US$1.00 and US$1.90. Economic development shifted the distribution to the right, moving the

TABLE 3.2 Poverty at Higher Poverty Lines, US$3.20 and US$5.50

a. Poverty rate by region at US$3.20 (%)

Region(s)	1990	1999	2008	2013	2015	Percentage change
East Asia and Pacific	85.3	67.1	37.4	17.5	12.5	–72.8
Europe and Central Asia	9.9[a]	21.1	7.5	5.7	5.4	–4.6
Latin America and the Caribbean	28.3	27	15.7	11.4	10.8	–17.5
Middle East and North Africa	26.8	21.7	16.7	14.4	16.3	–10.5
South Asia	81.7	76[a]	67.9	53.9	48.6[a]	–33.1
Sub-Saharan Africa	74.9	78.3	72.2	67.8	66.3	–8.6
Sum of regions	66.4	60.1	45	33.7	30.7	–35.7
Rest of the world	0.8	0.8	0.7	0.8	0.9	0.1
World	55.1	50.6	38.2	28.8	26.3	–28.9

b. Poverty rate by region at US$5.50 (%)

Region(s)	1990	1999	2008	2013	2015	Percentage change
East Asia and Pacific	95.2	87	63.6	42.4	34.9	–60.3
Europe and Central Asia	25.3[a]	44.5	17.1	14.1	14	–11.3
Latin America and the Caribbean	48.6	47	33.3	27.2	26.4	–22.2
Middle East and North Africa	58.8	54.5	46.6	42.3	42.5	–16.3
South Asia	95.3	93.1[a]	89.8	84.2	81.4[a]	–14
Sub-Saharan Africa	88.5	90.5	88.1	85.4	84.5	–4.1
Sum of regions	80.5	79.3	66.5	57	53.7	–26.7
Rest of the world	1.7	1.3	1.2	1.5	1.5	–0.2
World	67	66.8	56.5	48.7	46	–21

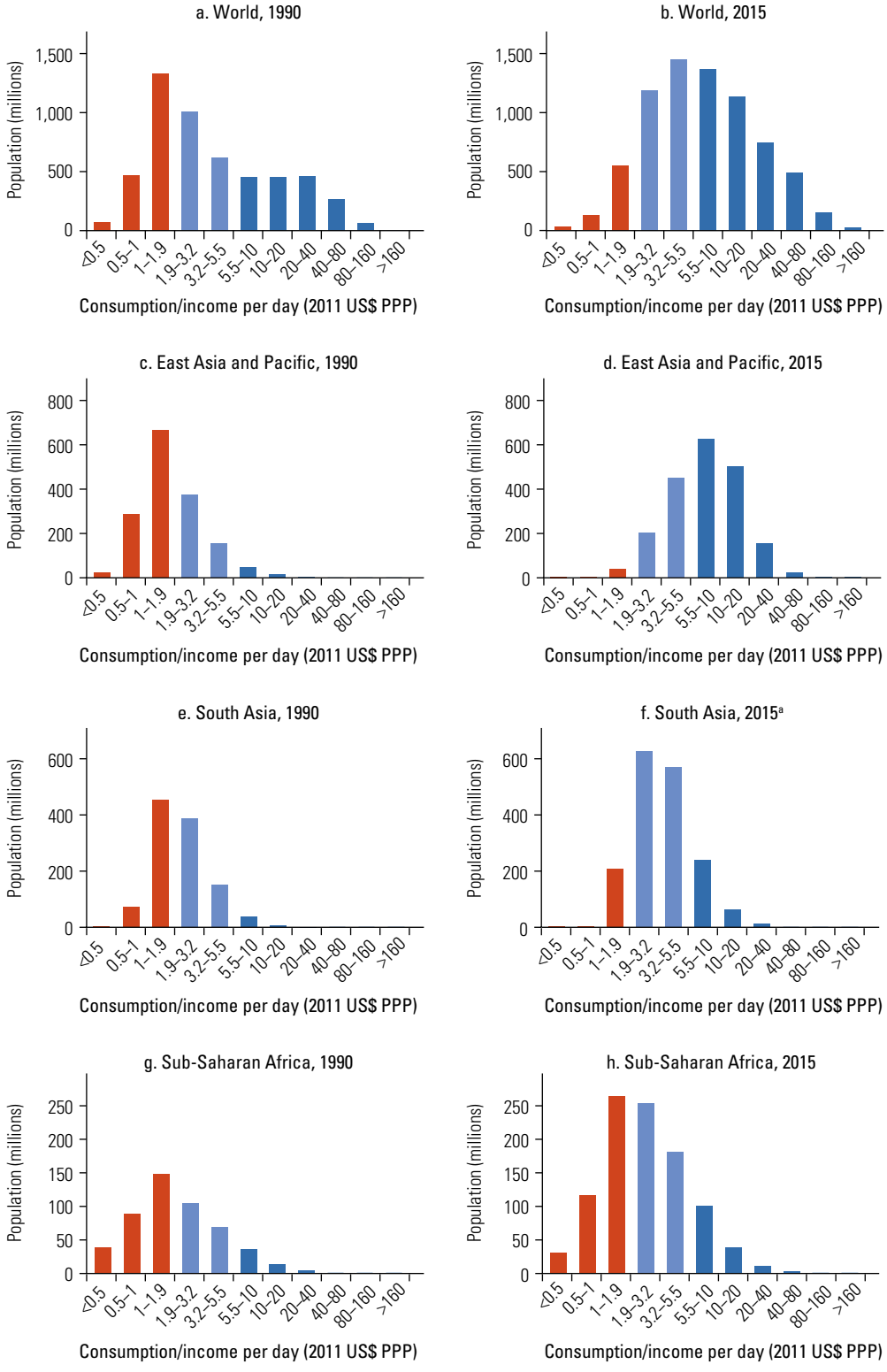
Source: PovcalNet (online analysis tool), World Bank, Washington, DC, http://iresearch.worldbank.org/PovcalNet/.
Note: The criteria for estimating survey population coverage is whether at least one survey used in the reference year estimate was conducted within two years of the reference year.
a. This estimate is based on less than 40 percent of regional population coverage.

hump over the US$1.90 threshold, leading to a rapid reduction in the number of people consuming less than US$1.90. In contrast, panel a shows that a significantly smaller share of people was living on more than US$1.90 but less than US$3.20. So the economic growth that led to a rapid reduction in extreme poverty could not carry as many people above the US$3.20 threshold. This narrative is similar in the case of the US$5.50 line: economic growth carried significantly fewer people past the US$5.50 threshold.

The global distribution of consumption for 2015 offers useful insights into what one may expect in the near future (as illustrated by the histogram in figure 3.1, panel b). In 2015, the peak in the consumption distribution had shifted to the right and is now between US$3.20 and US$5.50. Only about 10 percent of the global population is still living on less than US$1.90 a day. An implication of this is that growth in the near future will shift the distribution further to the right, leading to a rapid reduction in the share of people living on less than US$5.50 a day. However, with significantly fewer people now living below the $1.90 threshold, future growth will not lift as many people past this threshold as previously experienced. Thus, the reduction in extreme poverty will be tempered, although the potential for progress in reducing the share of the world's population living on less than US$5.50 a day will be significant. This reinforces the conclusion in chapter 1 that the slowdown in the rate of decline of extreme poverty will likely continue.

In addition to providing insight on the potential for global poverty reduction in the near-term future, these higher lines also present clear regional differences in the profile of the people living in extreme poverty or nearly so. The countries in East Asia and the Pacific not only had the largest reductions in extreme poverty, but they also experienced the largest reductions in the proportion of people living on less than US$3.20 and US$5.50 (figure 3.1, panels c and d). Between 1990 and 2015, the proportion of people living on less than each of these three

FIGURE 3.1 Consumption and Income Distributions, 1990 and 2015



Source: PovcalNet (online analysis tool), World Bank, Washington, DC, http://iresearch.worldbank.org/PovcalNet/.
Note: Bins were purposely selected to highlight US$1.90, US$3.20, and US$5.50 poverty lines. The size of the selected bins produces a histogram that approximates the shape of the estimated density function of the log of income/consumption.
a. This estimate is based on less than 40 percent of regional population coverage.

thresholds declined by nearly 60 percentage points. This can be seen in panels c and d in the large rightward shift of the distribution between 1990 and 2015. This massive progress over every threshold was experienced only in East Asia and the Pacific. In the other regions, progress in reducing poverty at the various thresholds has been much more modest.

Figure 3.1, panel e, reveals that in South Asia the peak of the consumption distribution was slightly below US$1.90 in 1990. By 2015, most people now lived on more than US$1.90 but less than US$3.20 (figure 3.1, panel f). There was a large decline—35 percentage points—in the share of people living on less than US$1.90. There was also a decline (60 percent) in the number of people living below US$1.90 (table 1A.1). The story for South Asia changes, however, when we examine the US$3.20 poverty threshold. The percentage of the total population living below this threshold declined substantially over this time, but because of a growing population, the number of people living on less than US$3.20 declined by only 8 percent over this 25-year period. In contrast to East Asia where the peak of the distribution essentially shifted past the US$5.50 threshold, in South Asia the peak of the distribution of consumption essentially shifted from just below US$1.90 to just below US$3.20.

In the case of Sub-Saharan Africa (figure 3.1, panels g and h), the distribution has shifted rightward only very slightly. Although chapter 1 reported that extreme poverty declined by 13 percentage points in Sub-Saharan Africa between 1990 and 2015, panel d reveals that the peak of the consumption distribution was essentially around US$1.90 in both 1990 and 2015. The decline in the prevalence of extreme poverty coincided with nearly a 50 percent increase in the number of people living in extreme poverty during this time period. Overall, the population of Sub-Saharan Africa nearly doubled in this time period, with one of the largest increases in population being for those living on less than US$3.20 and more than US$1.90. Economic growth slightly outpaced population growth resulting in a distribution of consumption that shifted only slightly to the right but grew significantly larger, reflecting the near doubling of the population.

Higher lines tailored to country circumstances: Societal poverty

The second set of complementary poverty lines the World Bank is now reporting are tailored to the specific levels of economic development of each country and are designed to measure societal poverty. The introduction of this measure is in direct response to recommendations of the Commission on Global Poverty, led by Professor Sir A. B. Atkinson, to "introduce a *societal* head count measure of global consumption poverty that takes account, above an appropriate level, of the standard of living in the country in question, thus combining fixed and relative elements of poverty" (World Bank 2017, xxi).

A key attribute of the IPL is that it is converted into local currencies using the 2011 PPP U.S. dollars to ensure that the value of the line reflects approximately the same purchasing power in all countries (see earlier discussion). If an individual who is able to buy US$2.00 worth of goods in one country each day is not considered poor, then an individual who is able to consume at that same level in another country will also not be poor. Everyone is assessed by the same standard regardless of where they live. This guiding principle of the monitoring of extreme poverty ensures that the material well-being of people can be assessed and compared meaningfully across the world.

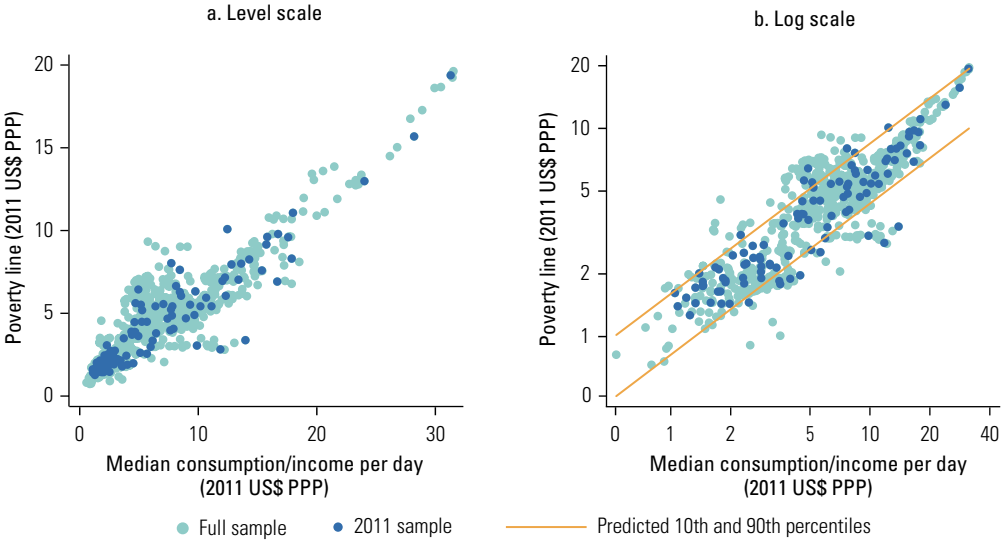
Although ensuring equality in the yardstick of poverty is desirable, there are some trade-offs in making this choice. One trade-off in particular helped guide the World Bank toward the development of a new complementary poverty line, the societal poverty line (SPL). Fixing the value of the line in constant PPP terms across all countries ensures that the bundle of goods that can be purchased is the same. As economies grow, however, this bundle is becoming a less useful indicator of basic needs in many places. For example, in 2015, the extreme poverty rate was less than 3 percent in more than half the 164 countries in which the World Bank monitors extreme poverty; and the majority of the world no longer lives in low-income economies. For many countries, the social

relevance of the IPL has lessened over time as their economies have grown. This is largely due to the observance that needs change as the world becomes richer (Townsend 1979).

A very closely related point is that, as countries grow richer, uniformity in the consumption bundle may not result in the same level of well-being everywhere. Carrying out basic functions of life might require more goods in some countries than in others, and fixing the consumption bundle could result in unequal assessment of people across the world in terms of their ability to function in society in a socially acceptable manner. Another way to express this is that ensuring equality across countries in terms of carrying out the same basic functions of life in each society may result in a poverty line that takes different monetary values (Sen 1983). For example, participating in the labor market may be viewed as a minimal social functioning; the cost of this functioning, however, may require only clothing and food in a poor society, whereas in a richer society it may require Internet access, a vehicle, and a cell phone, in addition to clothing and food. Another example that more directly builds on a relative notion of the poverty line revolves around the fact that participation in society with dignity may require more goods in a richer country than in a poorer country. Social participation might thus be more closely related to the concept of meeting basic needs in the poorest of countries, but in richer countries the ability to participate in society might be costlier.

This conceptual point, that the very definition of basic needs in terms of goods and services may vary across countries, appears to be empirically supported. Figure 3.2 shows that there is significant variation across countries in how basic needs are defined, as expressed in national poverty lines. The analysis in the figure is based on 699 estimated national poverty lines—all of which are expressed in comparable purchasing power terms. It reveals a strong positive correlation between the median level of consumption in each country and the assessment of basic needs. Analysis on a different set of national poverty lines has similarly shown that the values of absolute national poverty lines range across countries from US$0.63 a day to more than US$9.00 a day (in 2005 PPP U.S. dollars) and that higher

FIGURE 3.2 National Poverty Lines and Economic Development



Source: Jolliffe and Prydz 2016.
Note: Both panels plot 699 harmonized national poverty lines. Dark dots indicate the 104 poverty lines that are closest to 2011 (one unique line for each country), excluding lines prior to 2000. Both panels plot the same data. Panel a plots the lines on actual values. Panel b plots these same values, but the axis values of the plots are log transformations. Lines in panel b are predicted (conditional bivariate) 10th and 90th percentile lines. All axis values are expressed in 2011 purchasing power parity (PPP) U.S. dollars.

poverty lines correspond to relatively more well-off economies (Ravallion 2010).

This finding is not merely a cross-sectional association. If the definition of poverty changes as countries grow richer on average, national poverty lines should be changing in real terms over time. This is indeed what is observed. A few specific examples follow. In 2011, the government of India raised the real value of the urban poverty line by more that 40 percent, increasing it from Rs 33 to Rs 47 per person per day. The change in rural poverty lines was significantly less, about 19 percent, increasing from Rs 27 to Rs 32. At about this time, China increased the real value of the rural poverty line by more than 75 percent (Addison and Niño-Zarazúa 2012). Many governments have increased the real value of national poverty lines in recognition that their economies have grown so significantly that the concept of basic needs has changed fundamentally. After 15 years of keeping the real value of the national poverty line constant, the government of Nepal raised the real value of its poverty line in 2011 (CBS 2012). Similarly, the government of Jordan increased the real value of the poverty line by about 10 percent in 2011 (Jolliffe and Serajuddin 2018; World Bank 2009).[5] Absolute national poverty lines are behaving as if they were relative poverty lines in that they are becoming higher for richer countries. "It can be agreed that a sustained increase in average living standards is likely to lead eventually to more generous perceptions of what 'poverty' means in a given society," notes Ravallion (1998, 29).

Characteristics of the societal poverty line

To reflect this viewpoint, the World Bank will now initiate reporting on societal poverty, which is based on a poverty line that is adjusted for the median level of well-being in each country.[6] First, according to the definition of societal poverty used by the World Bank, individuals living in extreme poverty as measured by the IPL are also suffering from societal poverty. Second, the new measure considers that individuals are suffering from societal poverty if they are living on less than US$1.00 a day plus half of the value of median consumption (or income) per day in that country. If US$1.00 plus half the median consumption is less than the IPL, then the SPL is equal to the IPL. In many countries, this value is greater than US$1.90, and this greater value then becomes the SPL. More formally, the SPL adopted by the World Bank is calculated in 2011 PPP U.S. dollars as follows:

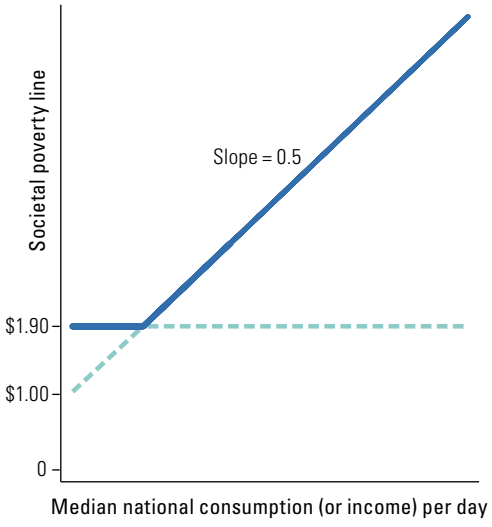
$$\text{SPL} = \max(\text{US\$1.90}, \text{US\$1.00} + 0.5 \times \text{median consumption}).^{7} \quad (3.1)$$

For example, in a country in which the median consumption per person is US$1.60 per day, the IPL is greater than US$1.00 plus half of US$1.60, so the value of the SPL is US$1.90.[8] Alternatively, in a country in which the median consumption is US$3.00 per day, the SPL is US$2.50 (US$1.00 + 0.5 × US$3.00). In defining societal poverty in this way, Jolliffe and Prydz (2017), build on the important contributions of Atkinson and Bourguignon (2001), Chen and Ravallion (2013), Foster (1998), and Ravallion and Chen (2011).

By this definition, societal poverty represents a combination of extreme poverty, which is fixed in value for everyone, and a relative dimension of well-being that differs in every country depending on the median level of consumption in that country. Figure 3.3 illustrates how the SPL changes as the median consumption in a country increases. In countries with low median consumption (less than US$1.80 per person per day), a rise in median consumption does not change the SPL. Indeed, the SPL has the same value as the IPL in all countries with median consumption at less than US$1.80. However, as countries with median consumption at more than US$1.80 become richer, and the median consumption increases, the value of the SPL also rises. The climbing cost of social participation as the economy grows is reflected in the positive slope of the line.

The slope of one-half, the rate at which the SPL is rising as countries become richer, comes from the empirical association observed between national poverty lines and different measures of overall consumption in society. It indicates that, on average, the national poverty lines are increasing at a rate equal to half the median consumption

FIGURE 3.3 Societal Poverty Line



Source: Jolliffe and Prydz 2017.
Note: The lower bound is equal to the international poverty line, which is currently valued at US$1.90 in 2011 purchasing power parity U.S. dollars. The slope is equal to 0.5. The intercept is US$1.00. The kink point in the figure is at a median national consumption or income of US$1.80.

in the countries. The slope of one-half and the intercept of US$1.00 are the values that most closely fit the data provided by the national poverty lines and overall consumption in each country. This observed relationship between national poverty lines and national well-being determines the formula for measuring societal poverty.[9] In an important sense, the SPL and the IPL share the same empirical underpinning. Both are anchored in the distribution of national poverty lines, which represent countries' own judgements of what poverty means for them. Whereas the IPL focuses narrowly—and deliberately—on the choices of some of the poorest countries, the SPL is built on information from across the whole range of levels of development.

In addition to fitting the data well, the slope coefficient of half the median is widely used by many countries and organizations as a measure of relative poverty and inclusion. In the academic literature on poverty, this slope has been a subject of discussion for a long time, and, in policy, the Organisation for Economic Co-operation and Development uses 50 percent of median household income as the headline poverty indicator for country poverty rates.[10] Similarly, European countries typically set national poverty thresholds at 50 percent or 60 percent of median disposable household income (Vecchi 2015). The gradient of 50 percent coincides with SDG indicator 10.2.1 on inequality, namely, the proportion of people living below 50 percent of the median income, by sex, age, and disability status.[11]

Similarly, the intercept of US$1.00 per person per day in 2011 PPP U.S. dollars corresponds in value with some relevant empirical findings. Ravallion (2016) estimates an empirical lower bound on consumption in part to address the issue of how to monitor the concept of leaving no one behind. His analysis indicates that the value of this consumption floor is US$0.67 in 2005 PPP U.S. dollars, which is US$1.00 after conversion to 2011 PPP.[12] There are also analyses that aim to estimate minimum biological needs—a concept that differs significantly from socially acceptable ways of meeting basic needs. The value of these minimum needs tends to be about US$1.00 (Lindgren 2015).[13]

The SPL is estimated by first extracting the median level of daily per capita consumption (or income) for each national distribution from PovcalNet, then following the formula in equation (3.1) to derive a set of country-specific values of the SPL.[14] If this value is greater than US$1.90, the SPL is passed to PovcalNet, which reports the poverty rate associated with this line. This rate is the societal poverty rate. (If the SPL $\leq$ US$1.90, then societal poverty is simply the same as extreme poverty estimated in chapter 1.)

By design, the SPL rises with growth. The population-weighted average SPL across all countries increased from US$5.30 in 1990 to about US$6.90 in 2015, reflecting the steady, global growth in real median consumption during that time. The SPL growth rate has been much stronger in higher-income countries. Among today's UMICs, the mean SPL nearly doubled over the same time period, rising from US$3.00 in 1990 to US$5.80 in 2015. In contrast, the average SPL only slightly increased in value in low-income countries over this period—in large part because of changes in country composition of these income categories.

TABLE 3.3 Average Societal Poverty Lines, by Region and Income Classification, 1990–2015

a. Region(s)	1990	1999	2008	2013	2015	Percentage change 1990–2015
East Asia and the Pacific	2.0	2.2	3.2	4.3	4.8	2.8
Europe and Central Asia	5.9[a]	4.4	7.1	7.8	7.6	1.8
Latin America and the Caribbean	3.9	4.1	5.2	6.1	6.1	2.2
Middle East and North Africa	3.6	3.8	4.5	4.7	4.6	1.0
South Asia	2.0	2.1[a]	2.2	2.5	2.6[a]	0.6
Sub-Saharan Africa	2.1	2.1	2.2	2.3	2.3	0.2
Sum of regions	2.7	2.7	3.4	4.0	4.1	1.4
Rest of the world	17.8	19.8	22.1	22.0	22.8	5.0
World	5.3	5.4	6.2	6.7	6.9	1.6
b. Income group	**1990**	**1999**	**2008**	**2013**	**2015**	**Percentage change 1990–2015**
Low income	2.1	2.1	2.1	2.2	2.2	0.1
Lower-middle income	2.2	2.2	2.5	2.8	2.9	0.7
Upper-middle income	3.0	3.0	4.4	5.4	5.8	2.8
High income	16.4	18.2	20.4	20.5	21.2	4.8

Source: PovcalNet (online analysis tool), World Bank, Washington, DC, http://iresearch.worldbank.org/PovcalNet/.
Note: The table presents (population-weighted) average of the value of country societal poverty lines, evaluated at US$1.00 + 50 percent × median consumption (or income) with a lower bound of US$1.90. Current (2018) World Bank income classifications have been used. The criteria 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.
a. This estimate is based on less than 40 percent of regional population coverage.

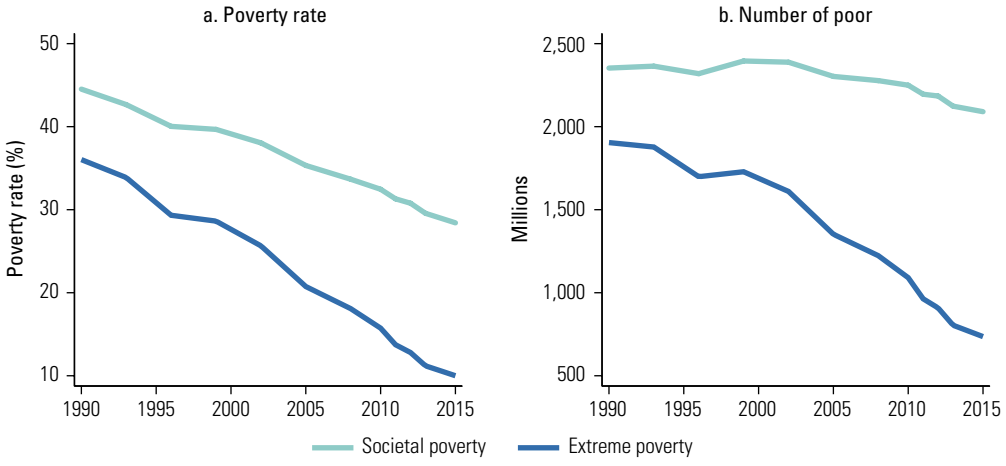
Table 3.3 reveals significant differences in the pattern of the regional growth of the SPL. For example, the mean SPL in South Asia, East Asia and Pacific, and Sub-Saharan Africa in 1990 was just slightly higher than the IPL of US$1.90. Because of strong economic growth in East Asia and the Pacific, the mean line more than doubled, to US$4.80 per day in 2015. In contrast, in Sub-Saharan Africa, which has experienced much weaker overall growth, there has been little change in the value of the SPL, increasing only by $0.20 since 1990.

Profile of societal poverty

Global counts of extreme poverty are based on data from PovcalNet (described in appendix A), and so too are the estimates of societal poverty presented in this chapter.[15] Using the country-specific SPL and following the same aggregation and lining-up methods as in the case of the extreme poverty estimates reported in chapter 1, the estimated societal poverty headcount was approximately 2.1 billion people in 2015.[16] This is almost three times more than the global count of people living on less than US$1.90 a day, which was estimated at approximately 736 million in 2015. Figure 3.4 displays the change in both the count and the rate of societal poverty, as measured by the SPL. It also displays the count and rate of absolute extreme poverty as measured by the IPL of US$1.90 a day. The first striking aspect of the figure is that, although the total count of people living in extreme poverty has declined rapidly, the number of people who are identified as societally poor has largely stayed the same over the 25 years, between 1990 and 2015.

In contrast, the share of the global population that is societally poor has fallen steadily since 1990, but at a much slower pace than the decline in extreme poverty (figure 3.4, panel a). This divergence in the rate of decline amplifies the distinction between the two measures. Table 3.4 shows that, in 1990, the societal poverty rate, at 44.5 percent, was estimated at about 9 percentage points higher than the extreme poverty rate (35.9 percent, as seen in figure 3.4, panel a). By 2015, the gap between societal and extreme poverty, in terms of the percentage point difference (18.4), had more than doubled. In a growing global economy, this divergence is an expected outcome, and the magnitude of the change in the difference in the rates over the decades highlights the distinction in the informational content in these measures. In the 1980s and early 1990s, the societal poverty rate and the extreme pov-

FIGURE 3.4 Societal Poverty, Global Estimates, 1990–2015



Note: Panel a shows the rate of extreme poverty based on the international poverty line (US$1.90, 2011 PPP) and societal poverty based on the societal poverty line. Panel b shows the corresponding number of people who are poor by both lines. PPP = purchasing power parity.

erty rate were largely similar concepts because most of the world population was living in countries with low median national consumption, whereby the IPL and the SPL were either identical or close in value. They largely portrayed the same picture of poverty. But now, as countries have grown richer, and median consumption is above US$1.80 in many countries of the world, the SPL is capturing significantly more information about the distributional aspects of growth.

Similar to the case of regional profiles of absolute poverty, Sub-Saharan Africa stands out because of the substantially higher rates of societal poverty. Although the societal poverty rate has declined 9 percentage points over the last 25 years in Sub-Saharan Africa, the overall rate is still almost half the population, 49 percent, in 2015. In contrast, societal poverty had dropped 38 percentage points in the East Asia and Pacific region, reducing by more than half the rate of 63.4 percent in 1990, to 25.1 per-

TABLE 3.4 Societal Poverty Headcount Rates, 1990–2015

a. Region(s)	1990	1999	2008	2013	2015	Percentage change 1990–2015
East Asia and the Pacific	63.4	46.6	34.7	27.2	25.1	–38.3
Europe and Central Asia	22.2[a]	27.0	19.4	17.7	17.3	–4.9
Latin America and the Caribbean	33.9	34.0	29.4	27.5	26.9	–7.0
Middle East and North Africa	28.6	26.6	23.7	21.5	22.9	–5.7
South Asia	51.0	46.9[a]	42.0	35.4	32.9[a]	–18.0
Sub-Saharan Africa	57.9	61.2	53.3	49.9	49.0	–9.0
Sum of regions	50.6	44.3	37.0	31.9	30.6	–20.0
Rest of the world	15.5	15.2	15.4	16.0	16.0	0.5
World	44.5	39.7	33.7	29.6	28.4	–16.1
b. Income group	**1990**	**1999**	**2008**	**2013**	**2015**	**Percentage change 1990–2015**
Low income	63.6	65.0	55.6	51.4	51.2	–12.3
Lower-middle income	50.5	46.7	40.3	34.9	32.9	–17.6
Upper-middle income	50.8	39.7	30.4	24.7	23.5	–27.3
High income	15.8	15.8	15.9	16.4	16.3	0.5

Source: PovcalNet (online analysis tool), World Bank, Washington, DC, http://iresearch.worldbank.org/PovcalNet/.
Note: World Bank income classifications are current as of 2018. Change is measured in percentage points (pp). "Sum of regions" was previously referred to as "developing world" for which PovcalNet monitors poverty.
a. The criteria 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.

cent in 2015. All developing regions have seen an overall decline in societal poverty rates since 1990, especially during the 2000s. In contrast societal poverty has been stubbornly static, at about 16.0 percent in aggregate, in the mainly high-income countries in the "rest of the world" category, though remaining lower than in all the developing regions.

A similar pattern emerges in the lower half of table 3.4, which presents societal poverty rates by country income classifications. Countries are shown in their income classification as of 2018. So a country identified as a UMIC in 2018 was not necessarily a UMIC in 1990. It might have grown economically into that classification, and this happened often. Partly for this reason, the largest declines in societal poverty occurred among UMICs. The countries classified as UMICs in 2018 had realized some of the highest economic growth rates over the preceding 25 years.

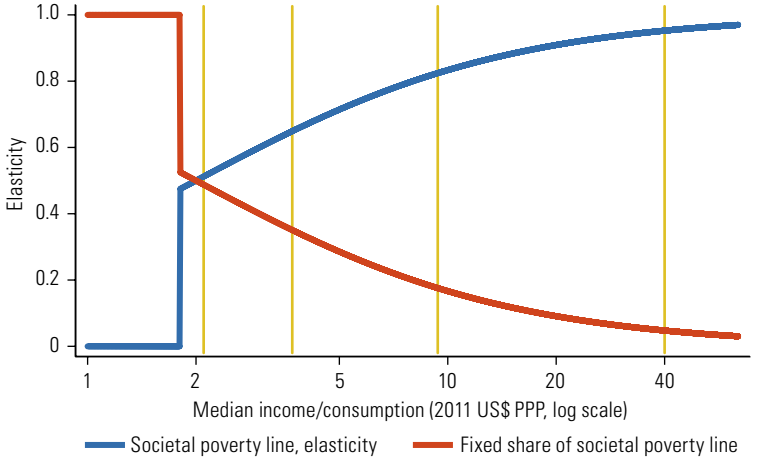
The analysis of societal poverty by income classification confounds two issues. Economic growth is an important engine of poverty reduction, but growth alone is a less effective vehicle for reducing societal poverty if a country is already in the higher-income category. This is because societal poverty is a hybrid concept that mixes elements of absolute and relative poverty (Foster 1998). An implication of this hybrid concept (more specifically, the lower bound at the IPL and the positive intercept at one) is that the value of the SPL increases in percentage terms at a rate that is slower than the percentage increase in economic growth. This means that, if median consumption doubles, the SPL increases, but by an amount less than double.

Because the percent increase in the SPL will always be less than the percent increase in median consumption, distribution-neutral growth will reduce societal poverty. By construction, the percentage increase in the SPL in response to a percentage increase in median consumption differs among rich countries relative to poor countries. For the poorest countries, among which median consumption is less than US$1.80 a day, growth in median consumption does not change the value of the SPL. If a country's median consumption grows sufficiently and crosses the US$1.80 kink point, then the SPL will increase slightly (see figure 3.1). Figure 3.5 shows that for a typical country that has reached high-income status, that is, median consumption around US$40 a day, the SPL rises at a percentage rate that is nearly equal to the percentage increase in median consumption. For the richest of countries, doubling median consumption nearly doubles the value of the SPL. In contrast, increasing the median consumption for countries whose median consumption is less than US$1.80 has no effect on the SPL if the SPL has less value than the IPL.

An alternative way to interpret this is that, among low-income countries, improvements in societal poverty are highly correlated with improvements in extreme poverty; in fact, they are identical in the poorest countries. Among high-income countries, the shared prosperity premium is highly correlated with reductions in societal poverty. Positive shared prosperity, combined with a shared prosperity premium, indicates that a country is growing and that the poorest in the country are benefitting more from this growth. In high-income countries, this is precisely what is needed to reduce societal poverty. In this way, societal poverty combines information about reductions in extreme poverty (discussed in chapter 1) and the notions of shared prosperity and the shared prosperity premium (discussed in chapter 2).

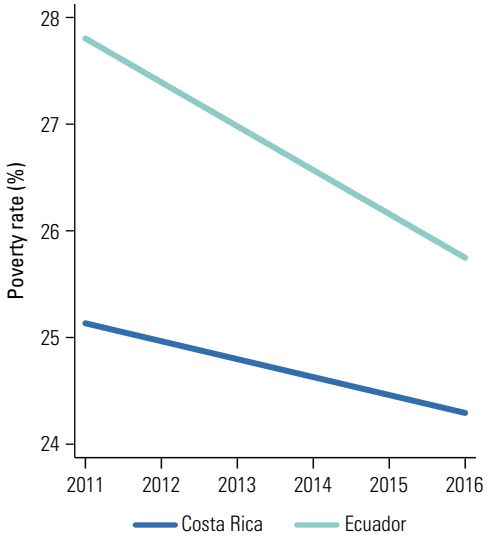
Figure 3.6 illustrates this by displaying the case of two UMICs, Costa Rica and Ec-

FIGURE 3.5 Change in the Societal Poverty Line from Growth



Note: Vertical lines indicate the average national median consumption or income in 2013 for World Bank income classification groupings (from left to right): low-income (US$2.1/day), lower-middle-income (US$3.7), upper-middle-income (US$9.3), and high-income (US$40) countries. PPP = purchasing power parity.

FIGURE 3.6 Societal Poverty and Shared Prosperity in Costa Rica and Ecuador



Note: The figure shows the decline in societal poverty for Ecuador and Costa Rica over a time period where both countries had similar levels of economic growth. Societal poverty declined by more in Ecuador because the poor shared to a much larger extent in the economic growth.

uador. Between 2011 and 2016, both countries exhibited comparable overall economic growth. The average annual growth in survey consumption was 1.95 percent in Costa Rica and 1.92 percent in Ecuador. However, the level of shared prosperity during this period was greater in Ecuador than in Costa Rica. In Costa Rica, growth among the bottom 40 percent of the income distribution (the bottom 40) was essentially the same as the growth in mean consumption. In contrast, the bottom 40 grew a full percentage point more than the mean in Ecuador, resulting in a shared prosperity premium. Although the level of growth was the same, the decline in societal poverty was greater in Ecuador over the period because of the difference in shared prosperity. An examination across all UMICs and high-income countries for which data are available on shared prosperity reveals a strong correlation (equal to 0.6) between the shared prosperity premium and the reduction in societal poverty. Improvement in societal poverty in UMICs and high-income countries requires economic growth in which the poor disproportionately share. An examination of LMICs and low-income countries likewise indicates a correlation between the shared prosperity premium and the reduction in societal poverty, but at a lower level (about 0.4). Improvement in societal poverty in low-income countries is driven much more by reductions in extreme poverty.

Because societal poverty is a hybrid of absolute and relative poverty concepts, it provides a natural bridge between the dual goals of reducing extreme poverty and increasing shared prosperity. Among the poorest countries, the value of the SPL is primarily determined by the IPL, and policies that promote reductions in extreme poverty will be the same as policies that reduce societal poverty. As countries become wealthier, the SPL is increasingly determined by the relative component of the poverty line, which means that policies that focus on raising the shared prosperity premium—the difference between the growth rate of the bottom 40 and the average growth rate in a country—will be more effective in reducing societal poverty than policies that simply promote growth in overall national income.

Why not simply use national poverty lines?

The social and economic assessments made by governments in setting national poverty lines underpin essentially all global poverty lines, including the IPL, the higher lines of US$3.20 and US$5.50 (based on the median national poverty lines in LMICs and UMICs), and now the SPL.[17] Despite the importance of using assessments of basic needs undertaken by countries, this report reflects a purposeful decision not to allow these assessments alone to completely determine the value of the SPL. An assumption underlying the SPL is that the cost of social participation rises with the level of economic development (as evidenced by the positive income gradient of national poverty lines), but does not vary across countries at the same income.[18]

This differs greatly from a proposal that each and every national poverty line should be used as a global SPL (Gentilini and Sumner 2012). Such a definition of societal poverty would certainly show respect for the judgment of the government of each country, but it would suffer from the problem that countries with the same level of median consumption could have different assessments

of basic needs. The premise of global societal poverty is that it captures the idea that participation in society becomes costlier as countries become richer and that it is also meant to serve as a tool for global poverty monitoring. This latter element, that the SPL is a global poverty line, means that it should allow comparisons across countries or over time. The use of national poverty lines as the SPL is problematic on both these counts.

National poverty lines do not rise strictly in parallel with economic development, nor are they fixed in value as is the IPL. Figure 3.2 shows that there are many cases in which a country may exhibit higher median consumption than some other country but have a lower national poverty line. There are also many cases in which countries at the same level of economic development rely on vastly different assessments of basic needs. If one were to construct a global SPL based on the sum of national poverty lines, then two people who consume at the same level and living in countries at the same level of economic development might be treated differently in the global aggregation of societal poverty. An awkward implication of the use of national poverty lines directly, without any averaging, is that the global aggregation based on this rule would embody a counterintuitive social judgement that someone who is poor in one country may not be identified as poor if his or her well-being were assessed in a richer country with a lower national poverty line.

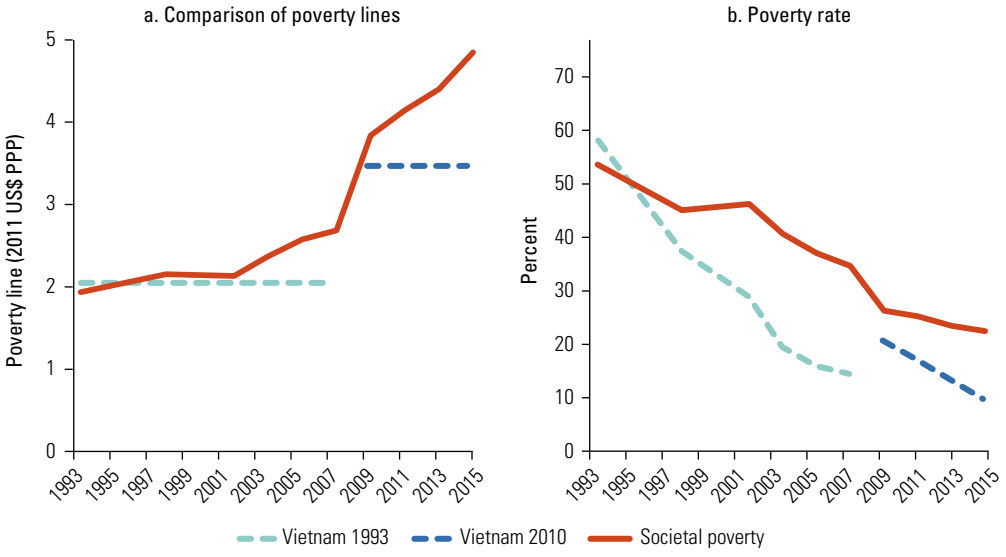
Figure 3.2, panel b, also includes predicted lines at the 90th and 10th percentiles from the bivariate (quantile) regression of the poverty line on median consumption. These predicted lines have similar slopes, and the ratio of these lines in levels is approximately 2 over the entire range. This suggests that, at any given level of national well-being, the range in values of national poverty lines is large. The most generous line is consistently about twice as large as the least generous line. This result is problematic for the proposal to construct a global count of the poor that treats the poverty line of each country as the relevant threshold. Allowing for such significant differences in the definition of basic needs across countries that are essentially at the same level of well-being is inconsistent with the idea that needs may rise as economic development expands.

In addition, the use of national poverty lines to count societal poverty is also problematic over time. As societies prosper, the real value of the threshold used to determine who is considered poor tends to increase. In poorer countries, this is typically a stepwise process. A poverty line is held static in real terms for several years or even several decades, and then it is revised and held static again for a long time. The length of time between the revisions depends on the country and the rate of growth experienced. The World Bank's SPL aims to capture how national poverty lines evolve as countries grow and thus provide a consistently defined measure of poverty that mirrors how societies typically measure poverty. The global SPL is derived from a global relationship between overall economic development and observed national poverty lines across societies, and this averaging over all countries helps improve comparability. An example from Vietnam follows.

In 1993, the General Statistics Office of Vietnam set a national poverty line that would reflect basic needs at the time. The line was equivalent to approximately US$2.05 a day at 2011 PPP U.S. dollars, which was kept roughly constant in real purchasing power until 2010.[19] Between 1992 and 2008, living standards improved twofold, and poverty measured at the 1993 line fell from 58.0 percent to 14.5 percent. When a new survey was conducted in 2010, a fresh welfare measure and poverty methodology were developed to capture living standards and poverty more effectively and reflect current basic needs. The new poverty line was set at a value equivalent to approximately US$3.50 a day at 2011 PPP, with a corresponding estimated poverty rate of 21 percent.

Figure 3.7 shows how the value of the national poverty line, SPLs, and corresponding headcount ratio have evolved in Vietnam. The SPL in 1993 was US$1.92 a day, only slightly below the national threshold of US$2.05. When the economy grew rapidly in the early 2000s, the value of the SPL rose. In 2010, when the new poverty line was set, the SPL was US$3.80, a little above the national poverty line; for the latest survey, it was US$4.90. Whereas the national poverty line is fixed in intervals, and goes up in discrete steps, the SPL has risen more smoothly, fol-

FIGURE 3.7 Comparing National and Societal Poverty Lines and Rates, Vietnam, 1993–2015



Note: PPP = purchasing power parity.

lowing the average trend of the national poverty line. In 2009, prior to the large increase in the national poverty line, the SPL definition of basic needs was much closer to the yet to be determined national poverty line definition of basic needs in 2010 than to the definition in 1993. Because the SPL was smoothly updated as the country prospered, the 2009 SPL was likely a better reflection of the social assessment of basic needs at that point than the existing definition based on the 1993 national poverty line value.

Conclusion

This chapter discusses two new sets of poverty lines that the World Bank will use to report on global poverty, and that are intended to complement the monitoring of poverty as measured with respect to the IPL. One set has complementary poverty lines that are fixed at values greater than the IPL. These lines reflect typical assessments of basic needs, as measured in national poverty lines, for a set of LMICs and UMICs and are valued at US$3.20 and US$5.50 (2011 PPP). The basic descriptive statistics of the fixed poverty lines are quite striking. As chapter 1 describes, 10 percent of the population is living on less than US$1.90. This chapter highlights that one-fourth of the world is living on less than US$3.20 per person per day, and slightly less than half of the world's population is living on less than US$5.50. The introduction of these lines is motivated primarily by noting that the world has grown richer, and now most of the extreme poor no longer live in low-income countries but rather are in middle-income countries. The relevance of an IPL based on national poverty lines from low-income countries has gradually diminished with time. The motivation for these new higher lines could just as easily be made by recognizing that it is difficult to precisely identify thresholds and legitimate to have differing views on what defines basic needs (Atkinson 1987). The higher lines can help address this concern.

There are a couple of key takeaways from these higher poverty lines. First, the rate of the reduction in extreme poverty in recent decades has not been matched by a similarly paced reduction in the share of people living on less than US$3.20 or US$5.50. More than 80 percent of the population of South Asia and Sub-Saharan Africa still live on less than US$5.50 a day. Second, a large share of the world's population is living on slightly less than US$5.50. A reasonable expectation is that, if it continues, global economic growth will produce a rapid reduction in the count of people below this threshold.

The other new poverty line that the World Bank is now reporting is the SPL, which is a mixture of the fixed-in-value IPL and a line that rises in value with median consumption in a country. According to this line, individuals are considered poor if they are living either on less than the IPL or on a dollar a day, plus 50 percent of median consumption in their country of residence. The decision to anchor the SPL in a median measure of well-being fits the data well (as assessed by regressions of national poverty lines on consumption) and corresponds to existing definitions of relative poverty in many countries. The proposed SPL is also relevant to SDG target 10.2 aimed at the social, economic, and political inclusion of all. The indicator associated with this target is the share of people living on less than 50 percent of the median income. Although the focus of this SDG is on reducing inequality and improving inclusion, it overlaps with the idea of monitoring societal poverty. As countries grow, societal poverty provides information on the extent to which the poor share in the growth.

The rate of decline in societal poverty has been slower than the rate of decline in extreme poverty. This is to be expected: the value of the SPL rises as the economy grows. Societal poverty has declined by about a third across the world, dropping from approximately 44.5 percent to 28.4 percent between 1990 and 2015. The reduction in extreme poverty was about twice this rate, declining by about 72 percent, dropping from 35.9 percent to approximately 10.0 percent. In the 1990s, when extreme poverty was more widespread, the difference between societal poverty and extreme poverty was relatively modest. In 2015, the societal poverty rate was almost three times larger than the extreme poverty rate. The continued decline in extreme poverty will likely lead to greater divergence in the informational content of these two measures.

Another useful takeaway from the examination of societal poverty is the differential performance across regions. Most regions experienced a fairly modest reduction in the prevalence of societal poverty. The exceptions were the economies of East Asia and the Pacific. Societal poverty was cut by more than half there between 1990 and 2015, declining from the highest rate of all regions in 1990 (63.4 percent) to one of the lower rates (25.1 percent) in 2015. This impressive performance in reducing societal poverty was driven in large part by the extraordinary success in eradicating extreme poverty.

The focus of monitoring poverty reduction will continue to be on the progress in bringing extreme poverty below 3 percent, but it is clear that this measure of poverty is becoming less helpful in the majority of countries, which already exhibit rates near zero. Even though extreme poverty rates may be well below 3 percent in many countries, this does not mean that poverty is no longer a problem in these societies. The higher poverty lines, set in accord with typical national poverty lines from countries classified as lower-middle and upper-middle income, provide useful guides for monitoring progress on the basis of lines that are fixed in real terms over time. For middle-income countries, these are useful markers for measuring progress that aligns with the definition of basic needs in middle-income countries from 2011. For lower-income countries, they could be viewed as markers for more aspirational targets in poverty reduction.

Similarly, the measure of societal poverty provides a global tool to measure poverty in accord with how countries assess changing standards of basic needs; however, in contrast to the US$3.20 and US$5.50 lines, the real value of these lines changes over time as the country grows richer. Although the SPL can change in real terms over time, it is constant in value across countries that are at the same level of median consumption or income. Because the SPL is constructed to reflect, on average, national poverty lines at different levels of median consumption or income, it provides a useful measure of global poverty that aligns well with national assessments of poverty. Keeping the IPL fixed is highly desirable because it allows the progress toward an unmoving target to be monitored, but, as the world advances toward the eradication of extreme poverty, the US$1.90 poverty line will become increasingly less relevant in many countries. In contrast, because the SPL yardstick is explicitly a function of the well-being of each country, it is, by construction, relevant for all countries over time.

Annex 3A

Historical global and regional poverty estimates

TABLE 3A.1 Historical Trends, Global Poverty Estimates, 1990–2015

a. US$3.20 Poverty

Year	Poverty rate (%)	Poverty gap (%)	Squared poverty gap	Poor (millions)	Population (millions)
1990	55.1	26.6	15.5	2,914.0	5,284.9
1993	54.4	25.6	14.7	3,013.4	5,542.9
1996	51.7	22.8	12.7	2,993.8	5,792.6
1999	50.6	22.3	12.4	3,056.1	6,038.1
2002	47.2	20.2	11.0	2,962.7	6,276.8
2005	42.2	16.9	8.8	2,753.3	6,517.0
2008	38.2	14.9	7.7	2,586.9	6,763.7
2011	32.8	12.1	6.0	2,298.8	7,012.8
2013	28.8	10.2	5.0	2,071.7	7,182.9
2015	26.3	9.2	4.6	1,932.7	7,355.2

b. US$5.50 Poverty

Year	Poverty rate (%)	Poverty gap (%)	Squared poverty gap	Poor (millions)	Population (millions)
1990	67.0	41.5	28.8	3,540.5	5,284.9
1993	67.9	40.9	28.0	3,761.2	5,542.9
1996	67.3	38.7	25.6	3,900.0	5,792.6
1999	66.8	38.1	25.1	4,035.2	6,038.1
2002	64.0	35.6	23.0	4,018.2	6,276.8
2005	60.4	31.9	19.9	3,939.4	6,517.0
2008	56.5	29.0	17.8	3,823.7	6,763.7
2011	52.2	25.3	15.0	3,662.3	7,012.8
2013	48.7	22.6	13.1	3,498.3	7,182.9
2015	46.0	20.9	12.0	3,386.5	7,355.2

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

TABLE 3A.2 Historical Trends, Regional Poverty Rates, 1990–2015

Percent

a. US$3.20 Poverty rates

Region	1990	1993	1996	1999	2002	2005	2008	2011	2013	2015
East Asia and Pacific	85.3	79.7	70.6	67.1	57.2	45.4	37.4	26.5	17.5	12.5
Europe and Central Asia	9.9[a]	15.1	19.2	21.1	14.9	11.8	7.5	6.6	5.7	5.4
Latin America and the Caribbean	28.3	27.1	27.7	27.0	24.9	21.4	15.7	13.1	11.4	10.8
Middle East and North Africa	26.8	28.9	28.0	21.7	19.6	18.8	16.7	14.9	14.4	16.3
South Asia	81.7	80.4	77.3	76.0[a]	75.5	71.5	67.9	58.9	53.9	48.6[a]
Sub-Saharan Africa	74.9	78.2	78.0	78.3	78.2	74.8	72.2	70.1	67.8	66.3
Sum of regions	66.4	65.1	61.6	60.1	55.9	49.9	45.0	38.5	33.7	30.7
Rest of the world	0.8	0.8	0.7	0.8	0.7	0.7	0.7	0.8	0.8	0.9
World	55.1	54.4	51.7	50.6	47.2	42.2	38.2	32.8	28.8	26.3

b. US$5.50 Poverty rates

Region	1990	1993	1996	1999	2002	2005	2008	2011	2013	2015
East Asia and Pacific	95.2	93.2	89.3	87.0	79.9	71.7	63.6	52.3	42.4	34.9
Europe and Central Asia	25.3[a]	35.9	41.2	44.5	34.5	26.5	17.1	15.4	14.1	14.0
Latin America and the Caribbean	48.6	48.0	48.2	47.0	45.1	40.9	33.3	29.6	27.2	26.4
Middle East and North Africa	58.8	59.4	59.6	54.5	51.4	49.5	46.6	43.0	42.3	42.5
South Asia	95.3	95.0	93.9	93.1[a]	92.8	91.0	89.8	86.4	84.2	81.4[a]
Sub-Saharan Africa	88.5	90.4	90.2	90.5	90.9	89.9	88.1	86.9	85.4	84.5
Sum of regions	80.5	81.2	80.2	79.3	75.7	71.3	66.5	61.2	57.0	53.7
Rest of the world	1.7	1.6	1.4	1.3	1.3	1.2	1.2	1.4	1.5	1.5
World	67.0	67.9	67.3	66.8	64.0	60.4	56.5	52.2	48.7	46.0

Source: PovcalNet (http://iresearch.worldbank.org/PovcalNet/), World Bank.
Note: The criteria 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. "Sum of regions" was previously referred to as "developing world."
a. This estimate is based on less than 40 percent of regional population coverage.

TABLE 3A.3 Historical Trends, Regional Number of Extreme Poor, 1990–2015

Millions

a. Number of poor at US$3.20

Region	1990	1993	1996	1999	2002	2005	2008	2011	2013	2015
East Asia and Pacific	1,366.5	1,332.1	1,224.7	1,205.4	1,057.1	859.5	723.8	524.0	352.2	254.2
Europe and Central Asia	46.1[a]	70.8	90.4	99.4	70.2	55.4	35.6	31.6	27.7	26.2
Latin America and the Caribbean	124.5	125.9	135.7	138.4	133.0	118.8	90.8	78.3	70.0	67.5
Middle East and North Africa	61.5	71.2	73.4	60.4	57.4	58.2	54.6	51.2	51.5	60.6
South Asia	925.3	971.5	992.5	1034.4[a]	1,085.5	1,081.5	1,075.8	973.5	916.0	847.2[a]
Sub-Saharan Africa	383.2	434.7	470.0	510.5	552.3	572.5	599.1	631.8	645.4	667.0
Sum of regions	2,907.1	3,006.2	2,986.7	3,048.6	2,955.5	2,745.9	2,579.6	2,290.3	2,062.8	1,922.9
Rest of the world	6.8	7.2	7.1	7.5	7.2	7.4	7.3	8.5	8.9	9.8
World	2,914.0	3,013.4	2,993.8	3,056.1	2,962.7	2,753.3	2,586.9	2,298.8	2,071.7	1,932.7

b. Number of poor at US$5.50

Region	1990	1993	1996	1999	2002	2005	2008	2011	2013	2015
East Asia and Pacific	1,525.3	1,557.7	1,550.2	1,562.2	1,476.0	1,357.5	1,231.0	1,035.2	851.7	710.4
Europe and Central Asia	117.3[a]	168.5	194.0	209.7	161.8	124.4	81.0	73.7	67.8	68.2
Latin America and the Caribbean	214.4	223.1	235.8	240.8	241.1	227.6	192.5	177.2	166.9	165.4
Middle East and North Africa	135.1	146.4	156.3	151.6	150.9	152.9	151.9	148.3	151.7	157.9
South Asia	1,080.1	1,148.5	1,206.7	1,267.6[a]	1,334.1	1,377.0	1,423.1	1,429.6	1,431.0	1,419.0[a]
Sub-Saharan Africa	452.8	502.6	543.5	590.3	641.5	687.4	731.7	783.4	813.1	849.5
Sum of regions	3,525.0	3,746.8	3,886.5	4,022.2	4,005.4	3,926.9	3,811.2	3,647.4	3,482.2	3,370.3
Rest of the world	15.5	14.4	13.5	13.0	12.9	12.6	12.5	15.0	16.1	16.1
World	3,540.5	3,761.2	3,900.0	4,035.2	4,018.2	3,939.4	3,823.7	3,662.3	3,498.3	3,386.5

Source: PovcalNet (http://iresearch.worldbank.org/PovcalNet/), World Bank.
Note: The criteria 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. "Sum of regions" was previously referred to as "developing world."
a. This estimate is based on less than 40 percent of regional population coverage.

Notes

1. Target 1.A of the MDGs is to halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day. The indicator for monitoring progress in achieving the target was fixed at the proportion of people living on less than the World Bank IPL of US$1.25 a day (in 2005 PPP values). Similarly, target 1.1 of the SDGs, to be achieved by 2030, is to eradicate extreme poverty for all people everywhere, measured as people living on less than $1.90 a day, the IPL. See Millennium Development Goals Indicators (database), Development Indicators Unit, Statistics Division, United Nations, New York, http://mdgs.un.org/unsd/mdg/Host.aspx?Content=Indicators%2fOfficialList.htm; "Sustainable Development Goals: 17 Goals to Transform Our World," United Nations, New York, http://www.un.org/sustainabledevelopment/.
2. The World Bank classification of countries according to regions and income groups is followed here. For details on income classification, see Fantom and Serajuddin (2016). For the World Bank regions, see "Select a Region," in "Where We Work," World Bank, Washington, DC, http://www.worldbank.org/en/country.
3. There may be different interpretations of what "fixed in real terms" means. Here it means that the lines are converted to domestic currency in 2011 prices, using the 2011 PPP conversion factors, and are thereafter adjusted over time by the main domestic consumer price index used in each country.
4. The bin sizes of the consumption distributions have been selected to correspond to key thresholds at US$1.90, US$3.20, and US$5.50. The statement then about most people consuming just less than US$1.90 is affected by the selected bin sizes. But an estimated density function of the log of consumption closely corresponds to the shape of the histogram displayed.
5. For more examples of countries that have changed the value of their national poverty lines, see the online appendix of Jolliffe and Prydz (2016), at https://static-content.springer.com/esm/art%3A10.1007%2Fs10888-016-9327-5/MediaObjects/10888_2016_9327_MOESM1_ESM.pdf.
6. The motivation for referring to the line as the SPL is drawn from the World Bank (2017, xxi), which recommends the introduction of "a 'societal' head count measure of global consumption poverty."
7. In the relatively small number of countries in which extreme poverty is assessed using income rather than consumption, the SPL is similarly defined in terms of income instead of consumption.
8. If median consumption is US$1.60, then US$1.00 + half of US$1.60 is US$1.80. This value is less than the IPL of US$1.90; so, in this case, the SPL is set at the lower bound, US$1.90.
9. For a detailed discussion of the fit of the SPL with national poverty lines and how this fit compares with other candidate specifications, see Jolliffe and Prydz (2017).
10. See Fuchs (1967); "Poverty Rate" (indicator), Organisation for Economic Co-operation and Development, Paris (accessed January 26, 2017), https://doi.org/10.1787/0fe1315d-en.
11. For details on each of the 17 SDGs, including metadata and indicators, see "Compilation of Metadata for the Proposed Global Indicators for the Review of the 2030 Agenda for Sustainable Development," Inter-agency Expert Group on SDG Indicators, Statistics Division, Department of Economic and Social Affairs, United Nations, New York, http://unstats.un.org/sdgs/iaeg-sdgs/metadata-compilation/. The decision that the cost of social participation is increasing in median consumption rather than, say, average consumption is discussed in detail in Jolliffe and Prydz (2017) and is consistent with arguments made by Aaberge and Atkinson (2013), Birdsall and Meyer (2015), and Stiglitz, Sen, and Fitoussi (2010) that the median is a better representation of the material well-being of a country relative to the mean and is also a simple way of capturing distributional aspects of well-being.
12. See Ferreira et al. (2016) for a discussion on inflating 2005 PPP values into 2011 PPP values. They assert that, on average, US$1.90 in 2011 PPP U.S. dollars maintains the same purchasing power as US$1.25 in 2005 PPP for the set of 15 poor countries that determine the IPL. They also demonstrate that this inflation rate of about 52 percent maintains an average purchasing power for essentially all countries in the PovcalNet database for which they esti-

mate poverty (and have measures of PPP in both years). Inflating US$0.67 by 52 percent results in US$1.01. Furthermore, direct reestimation of Ravallion's (2016) consumption floor using 2011 PPP gives a value of US$1.00 at 2011 PPP.

13. Similarly, Allen (2017, table 11) estimates the lowest cost of a diet consisting of 2,100 calories per day with 50 grams of protein and 34 grams of protein across several countries. The lowest value he estimates is US$0.98 in 2011 PPP terms for Zimbabwe.
14. See PovcalNet (online analysis tool), World Bank, Washington, DC, http://iresearch.worldbank.org/PovcalNet/. The estimates cited here were produced from the version of PovcalNet updated on October 1, 2016. China, India, and Indonesia have separate rural and urban distributions in PovcalNet, and no national median is readily available. For these countries, the national median is derived by combining the rural and urban population-weighted distributions available in PovcalNet and estimating the median of the joint national distribution. The resulting national median is used in defining the SPL for these countries. For high-income countries, the alignment of the surveys closest to the reference years is replicated using National Accounts data, the method in the PovcalNet reference-year aggregation.
15. The profile of societal poverty presented here is based on estimates from PovcalNet as of September 2018, the same version of the data used in the rest of this report. See PovcalNet (online analysis tool), World Bank, Washington, DC, http://iresearch.worldbank.org/PovcalNet/.
16. Household survey data do not exist for every country in every year, but all global poverty estimates are for a specific year. To overcome the data gaps, survey data are projected forward and, sometimes, backcast to produce country poverty rates for each year. For an overview of the methods, see Ferreira et al. (2016); Jolliffe et al. (2015).
17. The idea that national poverty lines represent social assessments of minimum needs has been a motivating argument behind the use of the IPL for many years. Ravallion, Datt, and van de Walle (1991) and the World Bank (1990) interpret national poverty lines in some of the poorest countries as representative of absolute minimum needs and use them in calculating the dollar-a-day IPL.
18. The claim is not being made that this report empirically disentangles whether the rising value of national poverty lines reflects the growing cost of social participation (as is assumed here) or simply reflects a definition of basic needs that is more generous, resulting in greater utility. For a discussion of this identification challenge, see Ravallion and Chen (2017).
19. The 1993 value was estimated from the national headcount ratio and an internationally harmonized welfare vector, following the method of Jolliffe and Prydz (2016).