POVERTY AND SHARED PROSPERITY 2022

Chapter 1 Annexes

WORLD BANK GROUP

Annex 1A

PIP Data and Methodology for the Measurement of Extreme Poverty

Data source

The data in this chapter are largely from the Poverty and Inequality Platform (PIP), the interactive computational tool for global poverty monitoring produced by the World Bank. PIP was launched in April 2022 to replace PovcalNet and the Poverty and Equity Data Portal, which were phased out in March 2022. PIP contains poverty estimates from more than 2,000 household surveys spanning 169 countries. In recent years, most of the surveys in PIP are taken from the Global Monitoring Database, the World Bank's repository of household surveys.[1]

Global and regional poverty estimates are calculated using the five steps outlined in the World Bank's "Poverty and Inequality Platform Methodological Handbook."[2] These steps can be summarized as follows. First, acquire household survey data from relevant sources. Second, using the survey data, construct an estimate of household income or consumption—so-called welfare aggregates. Third, adjust the welfare aggregates for differences in price levels across countries and over time to foster international comparability. Fourth, calculate estimates of poverty and inequality for a particular country for a particular year. Fifth, extrapolate or interpolate the estimates of poverty to a common year and calculate the population-weighted poverty rate. All decisions, assumptions, and protocols involved in these steps are governed by the World Bank's Global Poverty Working Group, which is composed of staff from the Poverty and Equity Global Practice, the Development Data Group, and the Development Research Group.[3]

Acquiring household survey data

Poverty rates are estimated from selected household surveys. In general, the surveys used ask a representative subset of households in a country about their consumption or income. These surveys are often the official surveys used by countries to monitor and report on poverty. Most household surveys from low-income countries are obtained through collaboration with their national statistical office, while most data for high-income countries are obtained from the European Union Statistics on Income and Living Conditions or from the Luxembourg Income Study Database.[4] When household-level data cannot be obtained, as a second-best option aggregated data such as income or consumption by population deciles are used.

Constructing welfare aggregates

PIP primarily uses a monetary measure of poverty. Monetary poverty is estimated from an aggregation of a household's income or from the monetary value of a household's consumption. Such aggregates are referred to jointly as welfare aggregates. Welfare aggregates are harmonized across countries and over time to maximize comparability, but country-specific decisions on

issues such as whether income or consumption is used, the design of the questionnaire of the household survey, what components are included in the welfare aggregate, and whether price differences within a country are accounted for imply that full comparability is not feasible.

Converting welfare aggregates

Welfare aggregates are typically expressed in local currencies in the prices prevailing at the time of data collection. To compare the consumption of an Indian household in 2011 with the consumption of a Nigerian household in 2018, one needs welfare aggregates expressed in the same prices. To this end, consumer price indexes are used to express all welfare aggregates in local 2017 prices, and purchasing power parities are used to account for price differences between countries. Once all welfare aggregates are expressed in the same units, a common poverty line is needed to estimate poverty. The international poverty line used in PIP is constructed from the poverty lines used by the poorest countries of the world (see box 1.1 in the main text and Jolliffe et al. 2022).

Calculating survey estimates of poverty and inequality

Armed with welfare distributions expressed in 2011 PPPs and an international poverty line, poverty and inequality can be calculated and compared across countries and over time. PIP contains a range of monetary poverty measures, a multidimensional poverty measure, inequality measures, and other distributional statistics.

Calculating global and regional poverty

Most countries do not conduct household surveys every year. Yet, to estimate regional and global poverty for a particular year, one needs an estimate of poverty for every country for the year in question. When a poverty estimate is not available for a given year, the estimates are extrapolated or interpolated from other years. The extrapolations assume that everyone's income or consumption grows in accordance with per capita growth rates from national accounts between the time of the survey and the year in question. For countries without any household data, it is assumed that their poverty rate is equal to the population-weighted average poverty rate in their region. To ensure the quality of the regional and global numbers, coverage rules are used to determine whether a particular reference year has sufficient nearby survey data for global and regional numbers to be presented.

Coverage rule

For regions in which the surveys within three years before or after the line-up year account for less than half of the regional population, the regional poverty estimate is not reported. In addition, to focus the measurement of global poverty on countries where most of the poor live, *global* poverty estimates are reported only if data are representative of at least 50 percent of the population in low-income and lower-middle-income countries because most of the poor live in these countries. This requirement is applied only to the global poverty estimate, not to the regional level. The World Bank classification of countries according to income groups in the line-up year is used.[5]

Notes

1. For general documentation on PIP, visit https://pip.worldbank.org; for the Global Poverty Monitoring Technical Notes, see https://pip.worldbank.org/publication.
2. The handbook as available at https://worldbank.github.io/PIP-Methodology/index.html.
3. Users can access the poverty and inequality estimates directly through the R (pipR) and Stata (pip.ado) packages.
4. Eurostat, European Commission, European Union Statistics on Income and Living Conditions, https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions; LIS Cross-National Data Center, Luxembourg Income Study Database, https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions.
5. For details on income classification, see Fantom and Serajuddin (2016) and World Bank, World Bank Country and Lending Groups (dashboard), https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups.

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Annex 1B

Additional Results on the Shift to 2017 PPPs

Impact of the 2017 PPPs and legacy series using 2011 PPPs

This report uses the 2017 purchasing power parities (PPPs) for the headline poverty series. A legacy series using the 2011 PPPs will continue to be available in the Poverty and Inequality Platform (PIP).[1] Having both PPP series available improves the transparency of the global poverty numbers and is an attempt to address the Atkinson Commission's recommendation that the World Bank provide a sense of the uncertainty surrounding its global poverty estimates. It also gives users flexibility, because some might prefer to continue with the 2011 PPPs, especially considering the recommendation by the Atkinson Commission not to change PPPs until 2030.[2]

This section is a brief overview of the main differences between the regional and global results using the 2011 PPPs and the 2017 PPPs. Figure 1B.1 shows the global and regional poverty trends with both the revised 2011 PPPs and the 2017 PPPs at all three poverty lines. The main takeaway from this comparison is that the poverty *trends* at the global and regional levels are consistent using the 2017 PPPs series and the legacy series in 2011 PPPs (see Jolliffe et al. 2022).

The switch from the revised 2011 PPPs to the 2017 PPPs has, however, important implications for global, regional, and country poverty levels. This annex outlines the changes to the global and regional estimates resulting from switching from the 2011 PPPs to the 2017 PPPs.[3] The regional extreme poverty estimates slightly increase in all regions except Sub-Saharan Africa. In 2019, the 2017 PPP–based estimate at the international poverty line in Sub-Saharan Africa is 3.2 percentage points lower than the equivalent in 2011 PPPs, translating into 35 million fewer people (see table 1B.1). Some larger changes in the levels of poverty are also observed at the country level, such as a downward revision in the poverty rate for Liberia, Nigeria, and Sierra Leone and an upward revision in Ghana. For some of these countries, additional technical analysis will be carried out to understand the drivers of these large revisions. Country-level documentation should be consulted for further details on this issue.

Moving from the US$3.20 (2011 PPP) poverty line to the US$3.65 (2017 PPP) poverty line causes a similarly small change in the global poverty headcount (0.5 percentage point in 2019). This change can be explained by offsetting changes at the regional level. Poverty increases in the East Asia and Pacific, Europe and Central Asia, Latin America and the Caribbean, and South Asia regions and decreases in the Middle East and North Africa and Sub-Saharan Africa regions (see table 1B.1).

By contrast, the revision to the poverty line for upper-middle-income countries from US$5.50 (2011 PPP) to US$6.85 (2017 PPP) is relatively high and drives an upward revision in poverty rates for all regions, including Sub-Saharan Africa (see box 1.1 in the main text for more details on the revision in the poverty line). The global poverty headcount rate at the US$6.85 line increased by 4.2 percentage points in 2019 because of the adoption of the 2017 PPPs, equivalent to 319 million more poor people, half of whom live in the East Asia and Pacific region alone.[4]

FIGURE 1B.1

Global and regional poverty trends at the three poverty lines, by region, 2017 PPPs versus 2011 PPPs (legacy series)
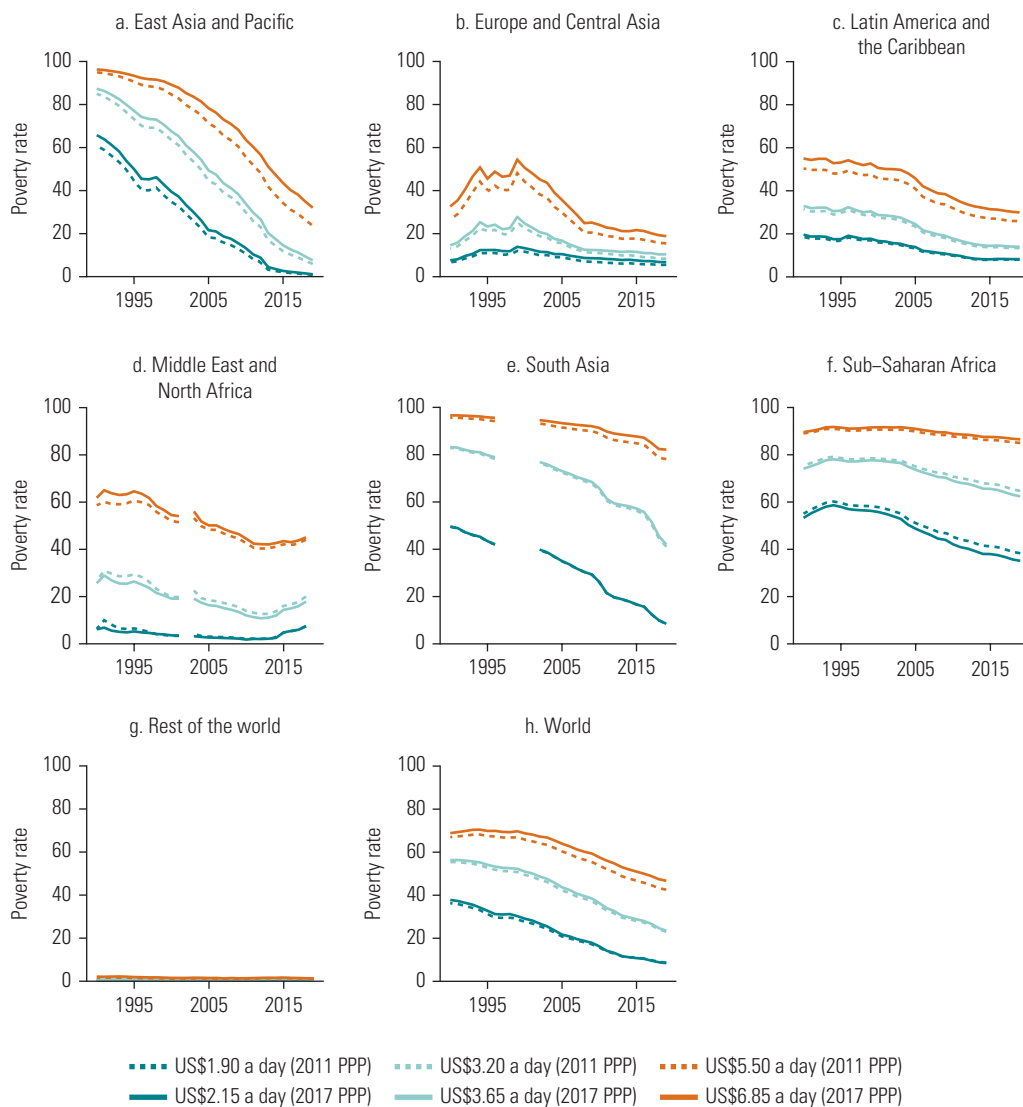
Source: Original calculations based on Jolliffe et al. 2022.
Note: The figure shows the global and regional poverty trends at the three poverty lines and compares the 2017 PPP-based estimates with those based on the 2011 PPP legacy series. PPP = purchasing power parity.

TABLE 1B.1

Changes in global and regional poverty, 2017 PPPs versus 2011 PPPs (legacy series), 2018 and 2019

	2018		2019	
	Poverty rate (%, 2011 PPP)	**Poverty rate (%, 2017 PPP)**	**Poverty rate (%, 2011 PPP)**	**Poverty rate (%, 2017 PPP)**
US$1.90 (2011 PPP) vs. US$2.15 (2017 PPP)				
World	9.1	8.9	8.7	8.4
East Asia and Pacific	1.2	1.5	0.9	1.1
Europe and Central Asia	1.0	2.4	1.1	2.4
Latin America and the Caribbean	4.0	4.3	4.1	4.3
Middle East and North Africa	7.5	7.5	—	—
South Asia	10.0	10.0	8.4	8.5
Sub-Saharan Africa	38.9	35.7	38.3	35.1
Rest of the world	0.6	0.6	0.6	0.6
US$3.20 (2011 PPP) vs. US$3.65 (2017 PPP)				
World	24.2	24.7	23.0	23.5
East Asia and Pacific	7.4	9.4	5.9	7.6
Europe and Central Asia	4.0	6.1	4.1	6.2
Latin America and the Caribbean	9.9	10.7	9.9	10.6
Middle East and North Africa	20.0	17.9	—	—
South Asia	44.7	45.6	41.1	42.0
Sub-Saharan Africa	65.4	63.1	64.7	62.4
Rest of the world	0.8	0.8	0.7	0.8
US$5.50 (2011 PPP) vs. US$6.85 (2017 PPP)				
World	43.3	47.4	42.6	46.7
East Asia and Pacific	26.4	34.9	23.7	32.1
Europe and Central Asia	11.7	15.5	11.5	15.0
Latin America and the Caribbean	23.7	28.3	23.6	28.0
Middle East and North Africa	44.1	45.1	—	—
South Asia	78.7	82.4	78.2	82.2
Sub-Saharan Africa	85.3	86.8	85.0	86.5
Rest of the world	1.3	1.4	1.2	1.4

Source: Original calculations based on Jolliffe et al. 2022.
Note: The table shows poverty estimates for 2018 and 2019 for all regions using 2017 PPPs versus 2011 PPPs (legacy series). Because data coverage for the Middle East and North Africa is below 50 percent in 2019, the estimate is not reported. PPP = purchasing power parity; — = not available.

Notes

1. The legacy series in 2011 PPPs refers to the 2011 PPP–based estimates available in PIP at the time of the May 2022 update. This is the second version of the 2011 PPPs released in 2017 and adopted by the World Bank in 2020 (World Bank 2020a). This series is also referred to as the revised 2011 PPPs in Jolliffe et al. (2022).

2. Sir Anthony Atkinson recommended in the report of the Commission on Global Poverty that the World Bank continue to report poverty estimates on the basis of the 2011 PPPs and not switch to new International Comparison Program (ICP) rounds until 2030 (World Bank 2017). Atkinson was concerned that new ICP rounds might "move the goal posts," especially in light of earlier revisions that caused large swings in global poverty estimates. This recommendation has the downside of excluding up-to-date price information from global poverty estimates. Recognizing this trade-off, the

Bank responded that it would continue to adopt future ICP rounds if new PPPs were driven by new price information and not changes in ICP methodology as in earlier rounds (World Bank 2016). Recent research has well documented the stability of the ICP methodology between the 2011 and 2017 rounds, and this was one reason the World Bank decided to adopt the 2017 PPPs (Deaton and Schreyer 2022; Jolliffe et al. 2022; World Bank 2020b).

3. This section updates findings from Jolliffe et al. (2022) relying on data from the 2022 September vintage of the global poverty data available in PIP and used throughout this report.

4. See chapter 1 for further details on the geographical distribution of the poor at the US$6.85 a day poverty line.

References

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Annex 1C

Global, Regional, and Country Estimates at the US$2.15 Poverty Line

Global and regional extreme poverty, 1990–2019

a. Global poverty at US$2.15-a-day poverty line

Year	Poverty rate (%)	Poverty gap (%)	Number of poor (millions)	Population
1990	37.8	13.9	1,996.2	5,280.1
1991	37.4	13.7	2,005.0	5,368.1
1992	36.5	13.3	1,990.1	5,454.5
1993	35.6	12.9	1,973.1	5,539.7
1994	34.3	12.1	1,927.4	5,623.7
1995	32.8	11.2	1,871.4	5,706.8
1996	31.3	10.6	1,809.7	5,789.7
1997	31.1	10.6	1,823.9	5,872.3
1998	31.3	10.7	1,861.0	5,954.0
1999	30.3	10.2	1,829.0	6,034.5
2000	29.1	9.8	1,781.4	6,114.3
2001	28.3	9.4	1,749.8	6,193.7
2002	26.9	8.8	1,684.3	6,272.7
2003	25.5	8.2	1,622.2	6,351.9
2004	23.6	7.4	1,520.9	6,431.5
2005	21.7	6.6	1,412.3	6,511.7
2006	20.9	6.3	1,377.1	6,592.7
2007	19.6	5.8	1,311.1	6,674.2
2008	18.8	5.5	1,269.4	6,757.0
2009	17.9	5.2	1,224.2	6,839.6
2010	16.3	4.7	1,126.7	6,921.9
2011	14.2	4.0	994.7	7,003.8
2012	13.3	3.7	939.5	7,089.3
2013	11.7	3.3	841.5	7,175.5
2014	11.2	3.2	811.8	7,261.8
2015	10.8	3.1	793.0	7,347.7
2016	10.5	3.0	778.2	7,433.6
2017	9.6	2.9	722.6	7,519.2
2018	8.9	2.7	673.5	7,602.5
2019	8.4	2.6	648.1	7,683.4

Source: World Bank, Poverty and Inequality Platform, https://pip.worldbank.org.
Note: The table shows the global poverty numbers for selected lined-up years. "Poverty rate" is the percentage of the population living on less than the international poverty line (IPL). "Poverty gap" is the average consumption shortfall of the population where the nonpoor have no shortfall. "Number of poor" is the number of people living below the IPL, calculated using the poverty rate and population data from the World Bank's World Development Indicators (https://databank.worldbank.org/source/world-development-indicators). "Population" is the total global population in each year. See Poverty and Inequality Platform for the complete series of yearly lined-up estimates.

TABLE 1C.1

Global and regional extreme poverty, 1990–2019 *(continued)*

b. Poverty rates at US$2.15-a-day poverty line, by region (%)

	1990	1993	1996	1999	2002	2005	2008	2011	2014	2017	2018	2019
East Asia and Pacific	65.8	58.2	45.5	42.8	33.2	21.6	17.6	10.4	3.6	1.9	1.5	1.1
Europe and Central Asia	3.2	6.4	8.3	9.8	7.4	6.3	4.4	3.9	3.5	2.8	2.4	2.4
Latin America and the Caribbean	16.7	15.6	16.2	14.7	12.4	10.5	7.6	6.0	4.3	4.4	4.3	4.3
Middle East and North Africa	6.1	5.1	4.8	4.0	—	2.7	2.4	2.1	2.6	6.0	7.5	—
South Asia	49.7	46.1	42.1	—	39.9	35.1	30.4	21.5	18.0	12.6	10.0	8.5
Sub-Saharan Africa	53.3	58.0	57.0	56.3	54.0	48.7	44.5	40.9	38.1	36.7	35.7	35.1
Eastern and southern Africa	—	57.3	55.6	55.7	55.7	50.1	45.8	42.8	41.7	41.3	40.8	—
Western and central Africa	55.3	59.1	59.2	57.2	51.5	46.6	42.6	38.2	32.7	29.9	28.2	27.2
Rest of the world	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.6	0.7	0.7	0.6	0.6

Source: World Bank, Poverty and Inequality Platform, https://pip.worldbank.org.
Note: The table shows the regional poverty headcount ratio at the US$2.15 poverty line for 1990–2019. The regional coverage rule is applied (see online annex 1A). See Poverty and Inequality Platform for a full series of yearly lined-up estimates. — = not available.

c. Number of poor at US$2.15-a-day poverty line, by region (millions)

	1990	1993	1996	1999	2002	2005	2008	2011	2014	2017	2018	2019
East Asia and Pacific	1,055.5	974.9	790.9	769.7	615.0	409.5	341.7	205.3	72.6	39.7	32.0	23.6
Europe and Central Asia	15.0	29.9	38.9	46.2	34.8	29.3	20.7	18.6	17.2	14.0	12.0	11.8
Latin America and the Caribbean	73.2	72.1	78.6	74.6	66.0	57.7	43.2	35.3	26.1	27.6	27.3	27.8
Middle East and North Africa	14.0	12.5	12.7	11.0	—	8.3	7.7	7.1	9.3	22.8	29.1	—
South Asia	563.0	558.0	542.0	—	575.7	532.4	484.7	356.9	310.6	225.7	181.7	156.3
Sub-Saharan Africa	271.5	321.0	341.6	364.9	378.6	369.6	366.2	365.5	368.7	385.3	384.8	389.0
Eastern and southern Africa	—	190.0	199.5	216.0	233.5	227.2	224.9	227.9	240.9	258.6	262.3	—
Western and central Africa	113.2	131.0	142.0	148.8	145.2	142.4	141.3	137.5	127.8	126.7	122.5	121.6
Rest of the world	4.1	4.7	5.0	4.9	4.9	5.6	5.3	6.0	7.3	7.7	6.7	6.7

Source: World Bank, Poverty and Inequality Platform, https://pip.worldbank.org.
Note: The table shows the regional number of poor at the US$2.15 poverty line for 1990–2019. The regional coverage rule is applied (see online annex 1A). See Poverty and Inequality Platform for a full series of yearly lined-up estimates. — = not available.

TABLE 1C.2

Poverty estimates at the US$2.15-a-day poverty line, by economy, most recent survey year

Economy	Survey year	Number of poor (millions)	Poverty rate (%)	Poverty gap (%)	Poverty gap/rate (%)
Albania	2019.0	0.0	0.0	0.0	n.a
Algeria	2011.2	0.2	0.5	0.2	33.6
Angola	2018.2	9.6	31.1	11.9	38.3
Argentina	2020.0	0.4	1.1	0.3	30.7
Armenia	2020.0	0.0	0.4	0.1	14.7
Australia	2018.0	0.1	0.5	0.4	81.2
Austria	2019.0	0.1	0.6	0.5	73.2
Azerbaijan	2005.0	0.0	0.0	0.0	n.a
Bangladesh	2016.0	21.3	13.5	2.4	18.0
Belarus	2020.0	0.0	0.0	0.0	n.a
Belgium	2019.0	0.0	0.1	0.1	80.8

(continued)

Table 1C.2
Poverty estimates at the US$2.15-a-day poverty line, by economy, most recent survey year *(continued)*

Economy	Survey year	Number of poor (millions)	Poverty rate (%)	Poverty gap (%)	Poverty gap/rate (%)
Belize	1999.0	0.0	18.0	7.7	43.0
Benin	2018.5	2.3	19.9	4.8	24.1
Bhutan	2017.0	0.0	0.9	0.2	16.5
Bolivia	2020.0	0.4	3.1	0.9	27.4
Bosnia and Herzegovina	2011.0	0.0	0.1	0.0	29.5
Botswana	2015.8	0.3	15.4	4.1	26.7
Brazil	2020.0	4.1	1.9	0.7	34.4
Bulgaria	2019.0	0.1	0.9	0.3	37.6
Burkina Faso	2018.5	6.0	30.5	8.4	27.4
Burundi	2013.5	6.2	65.1	25.2	38.8
Cabo Verde	2015.0	0.0	4.6	1.0	21.2
Cameroon	2014.0	5.8	25.7	8.3	32.4
Canada	2017.0	0.1	0.2	0.1	37.1
Central African Republic	2008.0	2.6	61.9	29.7	48.1
Chad	2018.5	4.8	30.9	8.4	27.3
Chile	2020.0	0.1	0.7	0.4	59.6
China (national)	2019.0	2.0	0.1	0.0	20.6
China (urban)	2019.0	0.6	0.1	0.0	22.3
China (rural)	2019.0	1.5	0.3	0.1	19.9
Colombia	2020.0	5.5	10.8	5.6	51.9
Comoros	2014.0	0.1	18.6	6.7	35.7
Congo, Dem. Rep.	2012.4	48.1	69.7	32.6	46.7
Congo, Rep.	2011.7	1.6	35.4	13.8	39.0
Costa Rica	2020.0	0.1	2.2	0.9	42.0
Côte d'Ivoire	2018.5	2.9	11.4	2.4	20.8
Croatia	2019.0	0.0	0.3	0.2	63.0
Cyprus	2019.0	0.0	0.2	0.2	100.0
Czech Republic	2019.0	0.0	0.0	0.0	n.a.
Denmark	2019.0	0.0	0.3	0.2	84.5
Djibouti	2017.0	0.2	19.1	6.4	33.3
Dominican Republic	2020.0	0.1	1.1	0.4	34.9
Ecuador	2020.0	1.2	6.5	2.1	31.8
Egypt, Arab Rep.	2017.8	2.4	2.5	0.4	16.0
El Salvador	2019.0	0.1	1.4	0.3	20.2
Estonia	2019.0	0.0	0.6	0.3	58.7
Eswatini	2016.2	0.4	36.1	12.8	35.4
Ethiopia	2015.5	27.2	27.0	7.6	28.2
Fiji	2019.2	0.0	1.3	0.2	13.6
Finland	2019.0	0.0	0.0	0.0	97.9
France	2018.0	0.0	0.0	0.0	64.1
Gabon	2017.0	0.1	2.5	0.6	23.5
Gambia, The	2015.3	0.3	13.4	3.0	22.6
Georgia	2020.0	0.2	5.8	1.5	25.1
Germany	2018.0	0.0	0.0	0.0	n.a.

(continued)

Table 1C.2
Poverty estimates at the US$2.15-a-day poverty line, by economy, most recent survey year *(continued)*

Economy	Survey year	Number of poor (millions)	Poverty rate (%)	Poverty gap (%)	Poverty gap/rate (%)
Ghana	2016.8	7.2	25.3	9.4	37.0
Greece	2019.0	0.1	0.7	0.4	60.9
Guatemala	2014.0	1.5	9.5	2.7	28.4
Guinea	2018.5	1.7	13.8	3.1	22.3
Guinea-Bissau	2018.4	0.4	21.7	4.7	21.7
Guyana	1998.0	0.1	11.9	5.9	49.3
Haiti	2012.0	3.0	29.2	10.1	34.6
Honduras	2019.0	1.2	12.7	4.3	33.7
Hungary	2019.0	0.0	0.3	0.1	42.9
Iceland	2017.0	0.0	0.0	0.0	n.a.
India (rural)	2019.3	106.7	11.9	2.1	17.8
India (urban)	2019.3	30.1	6.4	1.3	20.6
India (national)	2019.3	136.8	10.0	1.8	18.4
Indonesia (rural)	2021.0	5.5	4.6	0.6	12.7
Indonesia (urban)	2021.0	4.3	2.7	0.4	13.0
Indonesia (national)	2021.0	9.8	3.5	0.5	12.8
Iran, Islamic Rep.	2019.2	0.9	1.1	0.2	19.4
Iraq	2012.0	0.0	0.1	0.0	9.6
Ireland	2018.0	0.0	0.0	0.0	73.9
Israel	2018.0	0.0	0.5	0.2	33.7
Italy	2018.0	0.9	1.5	1.0	69.8
Jamaica	2004.0	0.0	1.2	0.3	21.7
Japan	2013.0	0.9	0.7	0.2	27.3
Jordan	2010.2	0.0	0.0	0.0	19.9
Kazakhstan	2018.0	0.0	0.0	0.0	15.4
Kenya	2015.7	14.1	29.4	8.6	29.4
Kiribati	2019.3	0.0	1.7	0.3	15.8
Korea, Rep.	2016.0	0.1	0.2	0.1	28.6
Kosovo	2017.0	0.0	0.4	0.2	38.1
Kyrgyz Republic	2020.0	0.1	1.3	0.2	14.7
Lao PDR	2018.4	0.5	7.1	1.2	16.6
Latvia	2019.0	0.0	0.2	0.2	76.4
Lebanon	2011.8	0.0	0.0	0.0	n.a.
Lesotho	2017.1	0.7	32.4	11.6	35.9
Liberia	2016.0	1.3	27.6	7.5	27.1
Lithuania	2019.0	0.0	0.5	0.4	64.4
Luxembourg	2019.0	0.0	0.1	0.1	86.4
Madagascar	2012.7	18.0	80.7	42.6	52.8
Malawi	2019.3	13.1	70.1	29.3	41.8
Malaysia	2015.9	0.0	0.0	0.0	12.5
Maldives	2019.6	0.0	0.0	0.0	n.a.
Mali	2018.6	2.8	14.8	3.0	19.9
Malta	2019.0	0.0	0.3	0.1	46.2

(continued)

Table 1C.2
Poverty estimates at the US$2.15-a-day poverty line, by economy, most recent survey year *(continued)*

Economy	Survey year	Number of poor (millions)	Poverty rate (%)	Poverty gap (%)	Poverty gap/rate (%)
Marshall Islands	2019.5	0.0	0.9	0.2	21.6
Mauritania	2014.0	0.3	6.5	1.6	24.0
Mauritius	2017.0	0.0	0.1	0.0	11.8
Mexico	2020.0	4.0	3.1	1.0	30.8
Micronesia, Fed. Sts.	2013.0	0.0	16.0	5.9	36.9
Moldova	2019.0	0.0	0.0	0.0	1.1
Mongolia	2018.0	0.0	0.7	0.1	13.2
Montenegro	2018.0	0.0	2.8	1.0	36.5
Morocco	2013.5	0.5	1.4	0.3	17.4
Mozambique	2014.4	17.0	64.6	29.4	45.5
Myanmar	2017.0	1.1	2.0	0.3	16.1
Namibia	2015.3	0.4	15.6	5.4	34.8
Nauru	2012.7	0.0	1.4	0.2	10.9
Nepal	2010.2	2.2	8.2	1.6	19.2
Netherlands	2019.0	0.0	0.1	0.0	36.7
Nicaragua	2014.0	0.2	3.9	0.9	21.8
Niger	2018.6	11.4	50.6	15.6	30.7
Nigeria	2018.8	60.5	30.9	9.0	29.1
North Macedonia	2018.0	0.1	3.4	1.2	35.8
Norway	2019.0	0.0	0.2	0.1	87.9
Pakistan	2018.5	10.5	4.9	0.6	12.6
Panama	2019.0	0.0	1.0	0.4	35.6
Papua New Guinea	2009.7	2.8	39.7	15.7	39.5
Paraguay	2020.0	0.1	0.8	0.2	22.4
Peru	2020.0	1.9	5.8	1.8	30.5
Philippines	2018.0	3.2	3.0	0.5	17.0
Poland	2019.0	0.0	0.0	0.0	n.a.
Portugal	2019.0	0.0	0.1	0.1	40.0
Romania	2019.0	0.4	2.2	0.8	35.0
Russian Federation	2020.0	0.0	0.0	0.0	13.3
Rwanda	2016.8	6.1	52.0	18.3	35.3
Samoa	2013.3	0.0	1.2	0.2	15.5
São Tomé and Príncipe	2017.0	0.0	15.6	3.9	24.9
Senegal	2018.5	1.5	9.3	1.8	18.9
Serbia	2019.0	0.0	0.0	0.0	1.4
Seychelles	2018.1	0.0	0.5	0.1	22.1
Sierra Leone	2018.0	2.0	26.1	6.0	23.2
Slovak Republic	2019.0	0.0	0.1	0.0	21.2
Slovenia	2019.0	0.0	0.0	0.0	n.a.
Solomon Islands	2012.8	0.1	26.6	7.3	27.6
Somalia	2017.0	10.3	70.7	30.6	43.2

(continued)

Table 1C.2
Poverty estimates at the US$2.15-a-day poverty line, by economy, most recent survey year *(continued)*

Economy	Survey year	Number of poor (millions)	Poverty rate (%)	Poverty gap (%)	Poverty gap/rate (%)
South Africa	2014.8	11.2	20.5	6.9	33.5
South Sudan	2016.5	7.3	67.3	32.0	47.6
Spain	2019.0	0.4	0.8	0.6	71.3
Sri Lanka	2016.0	0.3	1.3	0.2	13.2
St. Lucia	2016.0	0.0	5.1	2.8	53.9
Sudan	2014.0	5.8	15.3	3.6	23.7
Suriname	1999.0	0.1	18.4	13.9	75.6
Sweden	2019.0	0.0	0.3	0.2	74.9
Switzerland	2018.0	0.0	0.0	0.0	67.4
Syrian Arab Republic	2003.5	0.2	1.1	0.2	14.5
Taiwan, China	2016.0	0.0	0.0	0.0	n.a.
Tajikistan	2015.0	0.5	6.1	1.4	23.7
Tanzania	2017.9	25.3	44.9	13.6	30.3
Thailand	2020.0	0.0	0.0	0.0	23.7
Timor-Leste	2014.0	0.1	8.0	1.3	16.2
Togo	2018.4	2.2	28.1	8.5	30.2
Tonga	2015.0	0.0	1.1	0.2	19.2
Trinidad and Tobago	1992.0	0.0	2.1	0.5	26.1
Tunisia	2015.4	0.0	0.1	0.0	12.4
Türkiye	2019.0	0.3	0.4	0.0	13.2
Turkmenistan	1998.0	1.9	43.1	14.7	34.0
Tuvalu	2010.0	0.0	3.6	0.5	14.1
Uganda	2019.6	18.7	42.2	13.7	32.4
Ukraine	2020.0	0.0	0.0	0.0	19.3
United Arab Emirates	2018.0	0.0	0.0	0.0	n.a.
United Kingdom	2017.0	0.2	0.3	0.2	60.8
United States	2019.0	3.3	1.0	0.8	78.3
Uruguay	2020.0	0.0	0.2	0.1	37.4
Uzbekistan	2003.0	21.0	82.2	38.8	47.3
Vanuatu	2019.2	0.0	10.0	2.3	23.2
Venezuela, RB	2006.0	1.9	7.1	3.9	54.6
Vietnam	2018.0	1.2	1.2	0.2	17.5
West Bank and Gaza	2016.8	0.0	0.5	0.1	11.2
Yemen, Rep.	2014.0	5.1	19.8	4.8	24.1
Zambia	2015.0	9.7	61.4	32.8	53.4
Zimbabwe	2019.0	5.8	39.8	13.5	33.9

Source: World Bank, Poverty and Inequality Platform, https://pip.worldbank.org.
Note: "Survey year" refers to the year of the latest available survey in the Poverty and Inequality Platform. For economies that use the European Union Statistics on Income and Living Conditions surveys, the survey year is backdated by one year to align with the reference period for the income data in the survey (for example, the 2016 survey is listed as 2015). The decimal year notation is used when data are collected over two calendar years. The number preceding the decimal point is the first year of data collection; the number after the decimal point is the proportion of data collected in the second year. For example, the Algerian survey (2011.2) was conducted in 2011 and 2012, and 20 percent of the data was collected in 2012. "Poverty rate" is the percentage of the population living on less than the international poverty line. "Poverty gap" is the average consumption shortfall of the population where the nonpoor have no shortfall. "Poverty gap/rate" is the average consumption shortfall of the poor. n.a. = not applicable.

FIGURE 1C.1

Share of the extreme poor and total population living in rural areas, by region, 2019
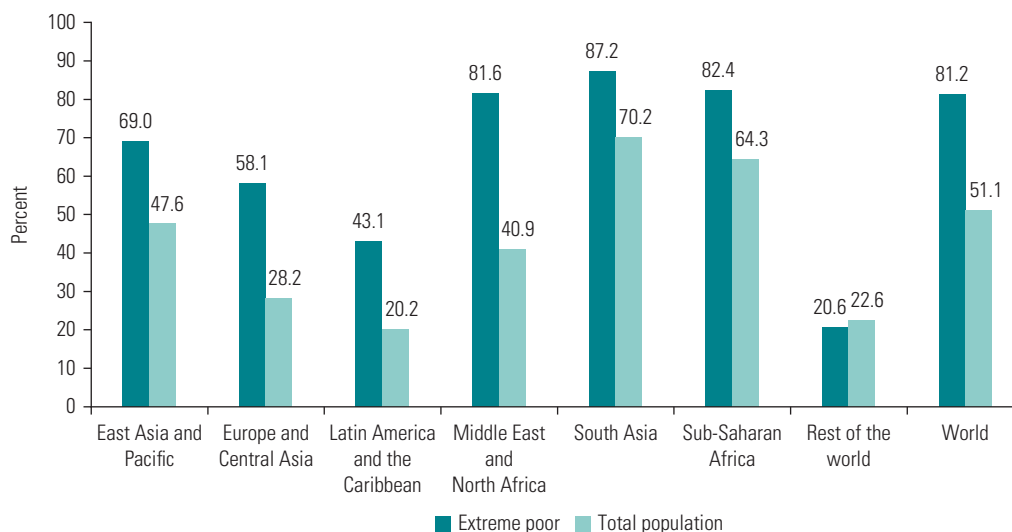
Source: World Bank, Global Monitoring Database (GMD).

FIGURE 1C.2

Educational attainment and age profile of the extreme poor versus total population, by region, 2019

a. Educational attainment of the extreme poor (age 15 and older)

b. Educational attainment of the population (age 15 and older)
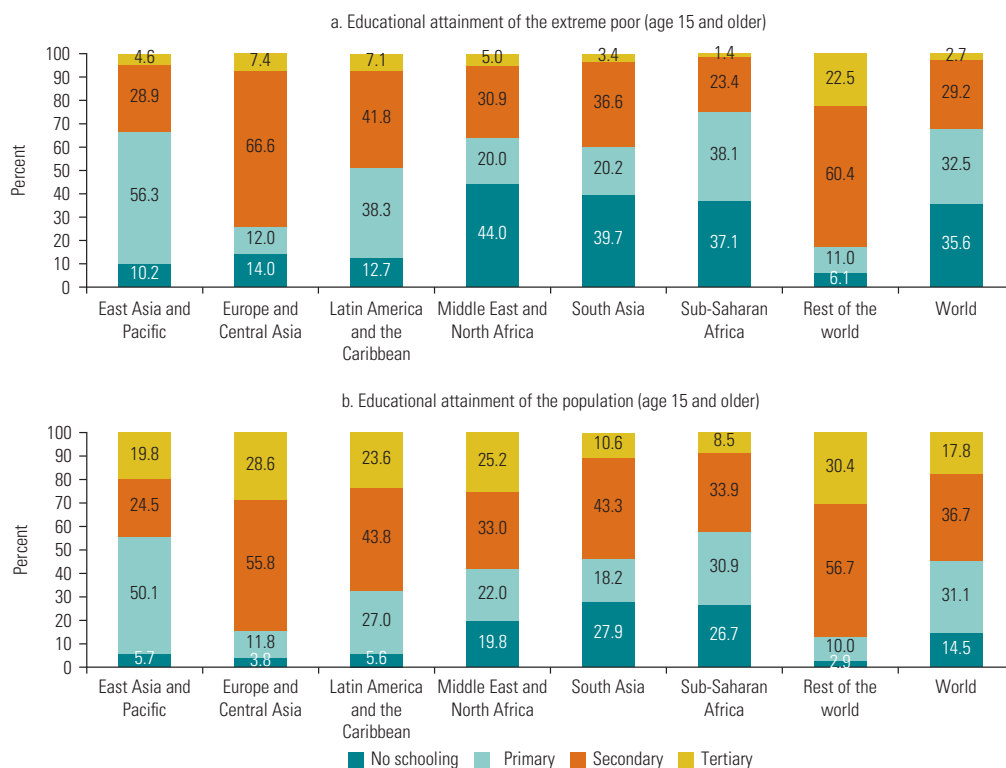
(continued)

FIGURE 1C.2

Educational attainment and age profile of the extreme poor versus total population, by region, 2019 *(continued)*

c. Age profile of the extreme poor

d. Age profile of the population

Legend: 0–14 | 15–24 | 25–34 | 35–44 | 45–54 | 55–64 | 65 and older
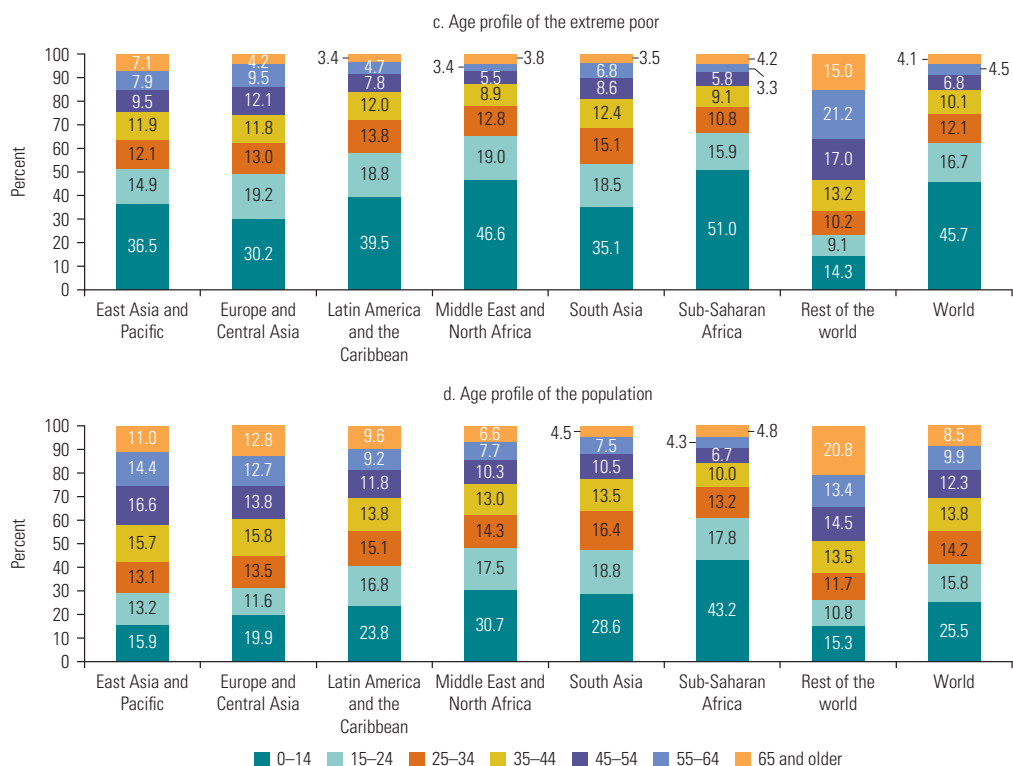
Source: World Bank, Global Monitoring Database (GMD).

FIGURE 1C.3

Ratio of poor women in the overall population, by region, 2019
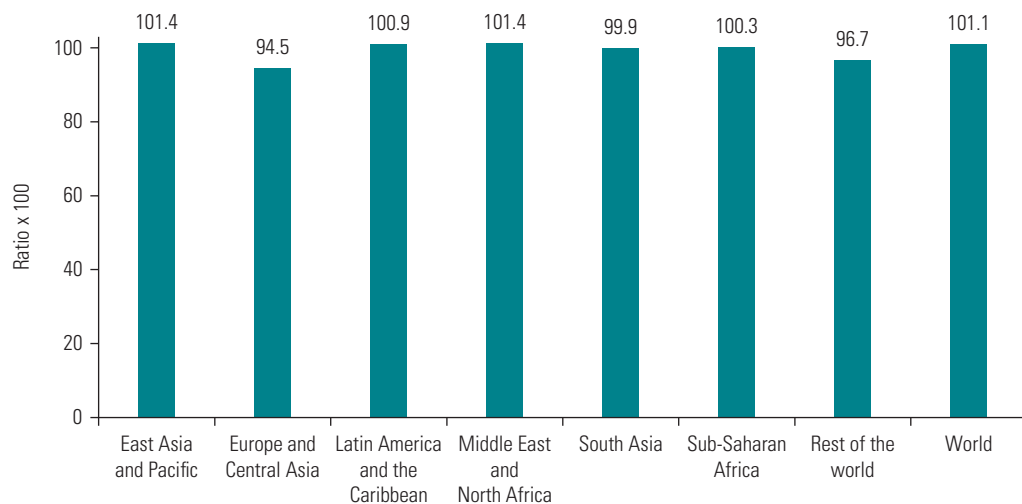
Source: World Bank, Global Monitoring Database (GMD).

TABLE 1C.3

Global poor, by income group and fragile and conflict-affected status, 2019

	Number of poor (millions)			Share of global poor (%)			Share of global population (%)
	US$2.15	US$3.65	US$6.85	US$2.15	US$3.65	US$6.85	
Low income	259.4	435.2	587.8	40.0	24.1	16.4	8.7
Lower-middle income	328.2	1,151.5	2,194.3	50.6	63.9	61.1	37.9
Upper-middle income	52.7	204.2	784.9	8.1	11.3	21.9	37.3
High income	7.8	11.7	23.3	1.2	0.6	0.6	16.1
Fragile and conflict-affected countries	257.7	452.0	641.7	39.8	25.1	17.9	10.4

Source: World Bank, Poverty and Inequality Platform, https://pip.worldbank.org.
Note: Income groups and fragile and conflict-affected historical classification are used.

TABLE 1C.4

Changes in data coverage for latest available line-up year, *Poverty and Shared Prosperity 2020* versus *2022*

	2017		2019	
	Number of economies with surveys	Share of regional population covered (%)	Number of economies with surveys	Share of regional population covered (%)
East Asia and Pacific	10	97	12	96
Europe and Central Asia	26	90	25	87
Latin America and the Caribbean	18	90	16	87
Middle East and North Africa	6	58	4	48
South Asia	5	22	6	96
Sub-Saharan Africa	33	79	28	55
Rest of the world	26	78	27	82
Total	124	71	118	85
Low- and lower-middle-income countries	55	52	46	79
Fragile and conflict-affected countries	14	43	16	50

Source: World Bank, Poverty and Inequality Platform, https://pip.worldbank.org.
Note: The table shows the improvement in data coverage between the *Poverty and Shared Prosperity 2020: Reversals of Fortune*, which published global estimates until 2017, and this report.

Annex 1D

Global and Regional Estimates at Higher Poverty Lines: US$3.65 and US$6.85 a day

Global and regional poverty at US$3.65-a-day poverty line, 1990–2019

a. Global poverty at US$3.65-a-day poverty line

Year	Poverty rate (%)	Poverty gap (%)	Number of poor (millions)	Population (millions)
1990	56.3	28.2	2,974.0	5,280.1
1991	56.4	28.0	3,026.4	5,368.1
1992	56.1	27.5	3,059.0	5,454.5
1993	55.7	27.0	3,088.2	5,539.7
1994	55.3	26.1	3,107.3	5,623.7
1995	54.1	25.1	3,089.8	5,706.8
1996	53.3	24.2	3,087.7	5,789.7
1997	52.8	24.0	3,097.9	5,872.3
1998	52.6	24.1	3,130.6	5,954.0
1999	52.3	23.6	3,155.8	6,034.5
2000	51.0	22.8	3,118.0	6,114.3
2001	50.1	22.2	3,106.0	6,193.7
2002	48.7	21.2	3,054.9	6,272.7
2003	47.6	20.3	3,022.7	6,351.9
2004	45.8	19.1	2,943.3	6,431.5
2005	43.7	17.7	2,845.4	6,511.7
2006	42.5	17.1	2,799.5	6592.7
2007	40.7	16.2	2,719.1	6,674.2
2008	39.6	15.6	2,677.7	6,757.0
2009	38.5	15.0	2,633.6	6,839.6
2010	36.4	13.9	2,518.7	6,921.9
2011	34.0	12.5	2,384.0	7,003.8
2012	32.6	11.8	2,314.5	7,089.3
2013	30.6	10.8	2,197.5	7,175.5
2014	29.7	10.4	2,157.1	7,261.8
2015	28.9	10.1	2,120.0	7,347.7
2016	28.0	9.8	2,084.4	7,433.6
2017	26.7	9.2	2,006.9	7,519.2
2018	24.7	8.4	1,880.4	7,602.5
2019	23.5	8.0	1,802.5	7,683.4

Source: World Bank, Poverty and Inequality Platform, https://pip.worldbank.org.
Note: "Poverty rate" is the percentage of the population living on less than the US$3.65-a-day poverty line. "Poverty gap" is the average consumption shortfall of the population where the nonpoor have no shortfall. "Number of poor" is the number of people living below the US$3.65-a-day poverty line calculated using the poverty rate and population data from the World Bank's World Development Indicators (https://databank.worldbank.org/source/world-development-indicators). "Population" is the total global population for each year. The global coverage rule is applied. See the Poverty and Inequality Platform for a complete series of yearly lined-up estimates.

TABLE 1D.1

Global and regional poverty at US$3.65-a-day poverty line, 1990–2019 *(continued)*

b. Poverty rates at US$3.65-a-day poverty line, by region, 1990–2019 (%)

	1990	1993	1996	1999	2002	2005	2008	2011	2014	2017	2018	2019
East Asia and Pacific	87.3	82.5	74.2	70.6	61.0	49.4	41.2	29.8	17.5	11.3	9.4	7.6
Europe and Central Asia	10.5	17.6	20.6	24.4	17.0	12.9	8.4	7.9	7.6	6.7	6.1	6.2
Latin America and the Caribbean	31.3	30.5	30.7	28.6	26.1	22.1	16.9	13.7	11.3	10.9	10.7	10.6
Middle East and North Africa	25.7	25.6	25.1	20.4	—	16.4	14.4	11.3	12.0	15.9	17.9	—
South Asia	83.2	81.3	78.9	—	76.9	73.1	69.6	61.4	58.2	51.7	45.6	42.0
Sub-Saharan Africa	74.1	77.7	77.1	77.7	76.8	73.7	70.6	68.1	65.7	64.1	63.1	62.4
Eastern and southern Africa	—	76.7	75.4	76.3	76.8	73.9	70.6	68.6	68.0	67.0	66.4	—
Western and central Africa	76.4	79.2	79.8	79.7	76.9	73.3	70.6	67.4	62.2	59.7	58.1	57.1
Rest of the world	0.8	0.8	0.8	0.7	0.7	0.8	0.8	0.8	0.9	0.9	0.8	0.8

Source: World Bank, Poverty and Inequality Platform, https://pip.worldbank.org.
Note: The table shows the regional poverty headcount ratio at the US$3.65 poverty line. The regional coverage rule is applied (see online annex 1A). See the Poverty and Inequality Platform for a complete series of yearly lined-up estimates. — = not available.

c. Number of poor at US$3.65-a-day poverty line, by region, 1990–2019 (millions)

	1990	1993	1996	1999	2002	2005	2008	2011	2014	2017	2018	2019
East Asia and Pacific	1,401.7	1,381.3	1,291.1	1,270.7	1,128.1	936.1	798.0	589.6	356.1	234.6	196.0	159.7
Europe and Central Asia	48.6	82.2	96.8	114.7	79.6	60.3	39.7	37.6	36.6	33.1	30.2	30.6
Latin America and the Caribbean	137.0	140.6	148.8	145.3	138.5	122.0	96.5	80.9	69.1	68.8	67.8	67.9
Middle East and North Africa	58.6	62.8	65.8	56.5	—	50.2	46.8	38.6	43.3	60.7	69.4	—
South Asia	943.6	983.8	1,015.9	—	1,109.2	1,109.6	1,107.5	1,020.6	1,005.3	926.9	827.7	771.9
Sub-Saharan Africa	377.5	429.7	462.1	503.5	538.6	559.2	581.1	608.4	636.3	672.7	680.0	691.0
Eastern and Southern Africa	—	254.0	270.6	296.2	322.0	335.1	346.8	365.4	393.2	419.6	427.0	—
Western and Central Africa	156.5	175.7	191.6	207.3	216.6	224.0	234.3	243.0	243.2	253.1	253.0	255.3
Rest of the world	7.0	7.8	7.1	7.0	7.4	8.0	8.2	8.4	10.2	10.0	9.3	9.2

Source: World Bank, Poverty and Inequality Platform, https://pip.worldbank.org.
Note: The table shows the number of poor at the US$3.65 poverty line. The regional coverage rule is applied (see online annex 1A). See the Poverty and Inequality Platform for a complete series of yearly lined-up estimates. — = not available.

TABLE 1D.2

Global and regional poverty at US$6.85-a-day poverty line, 1990–2019

a. Global poverty at US$6.85-a-day poverty line

Year	Poverty rate (%)	Poverty gap (%)	Number of poor (millions)	Population (millions)
1990	68.9	44.8	3,636.6	5,280.1
1991	69.3	44.9	3,721.3	5,368.1
1992	69.8	44.7	3,808.9	5,454.5
1993	70.4	44.5	3,899.5	5,539.7
1994	70.5	44.0	3,963.4	5,623.7
1995	69.9	43.1	3,986.8	5,706.8
1996	69.9	42.5	4,047.9	5,789.7
1997	69.4	42.1	4,078.2	5,872.3
1998	69.3	42.1	4,125.4	5,954.0
1999	69.7	41.9	4,207.8	6,034.5
2000	68.8	40.9	4,206.0	6,114.3
2001	68.2	40.2	4,223.7	6,193.7
2002	67.3	39.1	4,220.0	6,272.7
2003	66.8	38.3	4,244.2	6,351.9
2004	65.5	36.9	4,209.7	6,431.5
2005	64.0	35.4	4,164.9	6,511.7
2006	62.8	34.5	4,137.0	6,592.7
2007	61.3	33.2	4,089.6	6,674.2
2008	60.2	32.4	4,067.6	6,757.0
2009	59.4	31.6	4,061.4	6,839.6
2010	57.6	30.1	3,988.8	6,921.9
2011	56.1	28.5	3,928.6	7,003.8
2012	54.8	27.5	3,885.5	7,089.3
2013	53.1	26.0	3,810.5	7,175.5
2014	52.0	25.3	3,773.8	7,261.8
2015	51.0	24.7	3,746.3	7,347.7
2016	50.0	24.1	3,716.4	7,433.6
2017	48.9	23.2	3,675.9	7,519.2
2018	47.4	22.0	3,606.8	7,602.5
2019	46.7	21.4	3,590.2	7,683.4

Source: World Bank, Poverty and Inequality Platform, https://pip.worldbank.org.
Note: "Poverty rate" is the percentage of the population living below the US$6.85 a day poverty line. "Poverty gap" is the average consumption shortfall of the population where the nonpoor have no shortfall. "Number of poor" is the number of people living below the US$6.85 a day poverty line, calculated using the poverty rate and population data from the World Bank's World Development Indicators (https://databank.worldbank.org/source/world-development-indicators). "Population" is the total global population in each year. The global coverage rule is applied. See the Poverty and Inequality Platform for a complete series of yearly lined-up estimates.

TABLE 1D.2

Global and regional poverty at US$6.85-a-day poverty line, 1990–2019 *(continued)*

b. Poverty rates at US$6.85-a-day poverty line, by region, 1990–2019 (%)

	1990	1993	1996	1999	2002	2005	2008	2011	2014	2017	2018	2019
East Asia and Pacific	96.3	95.0	92.3	90.7	85.3	78.3	71.0	60.3	47.3	38.1	34.9	32.1
Europe and Central Asia	29.4	44.0	46.4	52.2	42.7	32.7	21.4	19.2	17.4	16.4	15.5	15.0
Latin America and the Caribbean	55.4	55.2	54.5	52.8	50.0	45.3	37.7	33.5	30.4	28.8	28.3	28.0
Middle East and North Africa	61.8	63.0	63.6	56.6	—	50.1	47.4	42.4	42.7	43.8	45.1	—
South Asia	96.6	96.3	95.6	—	94.6	93.3	92.3	89.8	88.1	85.0	82.4	82.2
Sub-Saharan Africa	89.6	91.6	91.1	91.6	91.5	91.0	89.5	88.6	87.6	87.1	86.8	86.5
Eastern and southern Africa	—	90.3	89.6	90.2	90.5	90.1	88.4	87.7	87.6	87.6	87.5	—
Western and Central Africa	92.5	93.6	93.3	93.6	93.1	92.2	91.3	90.0	87.6	86.5	85.7	85.1
Rest of the world	2.1	2.2	1.9	1.7	1.5	1.5	1.5	1.5	1.6	1.5	1.4	1.4

Source: World Bank, Poverty and Inequality Platform, https://pip.worldbank.org.
Note: The table shows the regional poverty headcount ratios at the US$6.85 poverty line. The regional coverage rule is applied (see online annex 1A). See the Poverty and Inequality Platform for a complete series of yearly lined-up estimates. — = not available.

c. Number of poor at US$6.85-a-day poverty line, by region, 1990–2019 (millions)

	1990	1993	1996	1999	2002	2005	2008	2011	2014	2017	2018	2019
East Asia and Pacific	1,545.8	1,590.9	1,605.1	1,631.9	1,577.4	1,484.1	1,375.4	1,194.7	961.6	792.2	729.6	674.5
Europe and Central Asia	136.4	206.1	217.9	245.4	199.9	153.2	100.7	91.6	84.3	80.5	76.2	74.3
Latin America and the Caribbean	242.4	255.0	264.6	268.7	265.2	250.0	215.9	198.3	185.9	181.7	180.1	180.0
Middle East and North Africa	141.0	154.8	166.4	156.7	—	154.1	153.5	145.1	154.4	167.0	174.9	—
South Asia	1,095.1	1,165.5	1,230.6	—	1,365.1	1,417.8	1,470.0	1,491.9	1,521.9	1,523.1	1,495.2	1,508.2
Sub-Saharan Africa	456.6	506.7	545.7	593.4	641.8	690.3	736.8	791.3	848.6	915.0	935.6	957.8
Eastern and Southern Africa	—	299.2	321.8	349.9	379.4	408.5	434.0	467.0	506.3	548.5	562.7	—
Western and Central Africa	189.4	207.6	223.9	243.5	262.4	281.8	302.8	324.3	342.3	366.6	372.9	380.4
Rest of the world	19.4	20.5	17.7	16.1	15.2	15.4	15.4	15.7	17.1	16.4	15.2	15.0

Source: World Bank, Poverty and Inequality Platform, https://pip.worldbank.org.
Note: The table shows the number of poor at the US$6.85 poverty line. The regional coverage rule is applied (see online annex 1A). See the Poverty and Inequality Platform for a complete series of yearly lined-up estimates. — = not available.

Annex 1E

Societal Poverty

Global and regional societal poverty line, 1990–2019

a. Global societal poverty

Year	Societal poverty rate (%)	SPL value (US$)	Number of societal poor (millions)
1990	46.3	5.9	2,444.7
1991	45.9	5.8	2,464.0
1992	45.2	5.8	2,464.4
1993	44.5	5.7	2,467.4
1994	43.4	5.7	2,440.9
1995	42.3	5.8	2,411.5
1996	41.4	5.8	2,398.8
1997	41.2	5.9	2,418.6
1998	41.5	6.0	2,468.3
1999	40.8	6.0	2,461.9
2000	40.2	6.1	2,456.7
2001	39.7	6.2	2,457.5
2002	38.9	6.2	2,441.0
2003	38.2	6.3	2,426.3
2004	37.2	6.4	2,391.1
2005	36.1	6.5	2,353.2
2006	35.6	6.7	2,349.7
2007	34.9	6.9	2,330.6
2008	34.4	6.9	2,323.0
2009	33.9	7.0	2,315.8
2010	32.8	7.1	2,273.1
2011	31.7	7.1	2,217.7
2012	31.2	7.2	2,210.5
2013	30.1	7.3	2,159.3
2014	29.6	7.4	2,148.9
2015	29.1	7.5	2,138.4
2016	28.9	7.7	2,148.1
2017	28.4	7.8	2,136.8
2018	27.7	8.0	2,103.2
2019	27.2	8.2	2,086.8

Source: World Bank, Poverty and Inequality Platform, https://pip.worldbank.org.
Note: "Societal poverty rate" is the percentage of the population living below each country's specific societal poverty line (SPL). "SPL value" is the population-weighted average value of the SPLs of all countries. "Number of societal poor" is the number of people living below each country's SPL, calculated using the poverty rate and population data from the World Bank's World Development Indicators database (https://databank.worldbank.org/source/world-development-indicators). See the World Bank's Poverty and Inequality Platform (https://pip.worldbank.org) for a complete series of yearly median consumption/income values used to calculate the SPL using the formula in box 1.1 in chapter 1.

TABLE 1E.1

Global and regional societal poverty line, 1990–2019 *(continued)*

b. Societal poverty rate, by region (%)

Year	East Asia and Pacific	Europe and Central Asia	Latin America and the Caribbean	Middle East and North Africa	South Asia	Sub-Saharan Africa	Eastern and southern Africa	Western and central Africa	Rest of the world
1990	67.5	22.8	35.1	28.6	53.1	57.4	—	58.2	15.6
1991	65.7	23.3	34.7	29.9	52.5	59.0	—	59.0	15.7
1992	63.2	24.8	34.7	29.0	51.4	60.1	—	59.4	15.9
1993	60.3	26.5	35.0	28.5	50.9	61.0	61.6	60.2	16.1
1994	55.9	28.6	34.3	28.3	50.5	61.9	62.4	61.1	16.1
1995	52.9	28.0	34.5	28.4	49.7	61.3	61.3	61.3	15.9
1996	50.5	28.1	35.6	27.8	49.0	60.5	60.4	60.8	15.8
1997	50.3	26.6	35.2	27.3	—	60.3	—	60.0	15.7
1998	51.6	26.6	34.5	26.5	—	60.0	60.5	59.1	15.7
1999	49.0	28.9	34.8	26.0	—	59.8	60.3	59.0	15.5
2000	47.3	28.4	34.1	25.5	—	59.6	60.3	—	15.4
2001	46.1	27.4	33.9	25.5	—	59.0	60.4	56.8	15.5
2002	44.0	26.4	33.9	—	47.8	58.0	60.6	54.1	15.5
2003	42.3	26.3	33.3	25.5	47.3	57.1	59.9	53.0	15.5
2004	40.5	25.5	32.6	24.6	46.3	55.5	58.1	51.7	15.5
2005	38.3	24.8	32.2	24.0	45.4	54.5	56.8	51.1	15.5
2006	37.9	23.5	31.1	23.9	44.7	53.6	55.6	50.7	15.5
2007	36.7	22.2	30.9	23.5	43.8	52.7	54.6	—	15.6
2008	36.2	20.9	30.3	23.0	43.2	51.7	53.6	48.8	15.6
2009	35.2	20.5	29.9	22.6	42.6	51.5	53.5	48.6	15.3
2010	34.0	20.0	29.2	21.8	41.0	50.4	52.6	47.1	14.7
2011	32.2	19.6	28.7	21.2	38.8	49.6	51.7	46.5	14.9
2012	31.3	19.4	28.3	20.7	37.9	49.2	51.8	45.4	15.2
2013	28.2	19.0	27.7	20.5	37.4	48.5	51.0	44.8	15.3
2014	27.3	19.1	27.3	21.0	36.8	47.8	50.5	43.8	15.0
2015	26.0	18.6	27.2	22.3	36.0	47.6	50.3	43.7	14.9
2016	25.5	18.5	27.5	22.8	35.3	47.4	50.3	43.1	15.1
2017	25.2	18.2	27.2	23.4	33.6	47.1	50.3	42.3	15.2
2018	24.3	17.4	27.1	24.3	31.7	46.5	49.9	41.5	15.1
2019	23.2	17.6	27.3	—	30.4	46.2	—	41.0	15.1

Source: World Bank, Poverty and Inequality Platform, https://pip.worldbank.org.
Note: Table shows the lined-up regional societal poverty estimates calculated as the population-weighted regional average of each country's societal poverty rates. The regional coverage rule is applied (see online annex 1A). See the Poverty and Inequality Platform for a complete series of the yearly median consumption/income values used to calculate the societal poverty line based on the formula in box 1.1 in chapter 1.
— = not available.

TABLE 1E.1

Global and regional societal poverty line, 1990–2019 *(continued)*

c. Number of societal poor, by region (millions)

Year	East Asia and Pacific	Europe and Central Asia	Latin America and the Caribbean	Middle East and North Africa	South Asia	Sub-Saharan Africa	Eastern and southern Africa	Western and central Africa	Rest of the world
1990	1084.3	105.7	153.7	65.2	602.4	292.2	—	119.1	141.2
1991	1070.2	108.5	154.4	69.9	608.6	308.9	—	124.1	143.4
1992	1044.0	115.9	157.4	69.4	608.3	323.6	—	128.4	145.7
1993	1009.9	124.2	161.4	69.9	615.5	337.3	203.9	133.4	149.1
1994	948.6	134.1	161.1	70.9	624.4	351.4	212.3	139.1	150.5
1995	908.6	131.5	164.8	72.7	626.8	357.8	214.5	143.4	149.2
1996	877.8	132.2	172.6	72.7	630.7	362.6	216.7	145.9	150.1
1997	885.6	125.1	173.5	72.8	—	370.7	—	147.9	149.7
1998	918.1	125.3	173.1	71.9	—	378.5	228.8	149.7	150.6
1999	880.6	136.0	177.0	72.0	—	387.4	234.0	153.4	150.3
2000	859.4	133.3	176.3	71.9	—	396.4	240.0	—	149.8
2001	844.9	128.6	177.7	73.1	—	402.7	246.8	155.9	151.7
2002	814.1	123.7	179.8	—	689.8	406.4	254.0	152.4	153.6
2003	789.5	123.0	179.0	75.7	694.0	410.9	257.5	153.4	154.1
2004	762.0	119.6	177.9	74.2	691.8	410.5	256.7	153.8	155.2
2005	725.6	116.3	177.8	73.6	689.6	413.9	257.6	156.2	156.6
2006	724.5	110.6	173.7	74.7	689.9	418.2	258.9	159.3	158.2
2007	707.0	104.5	175.0	74.7	687.1	422.4	260.9	—	159.9
2008	701.2	98.7	173.3	74.5	688.1	425.2	263.2	162.0	161.9
2009	686.8	97.2	172.8	74.5	688.7	435.8	270.2	165.6	159.9
2010	668.0	95.1	170.9	73.3	672.6	438.1	272.9	165.2	155.1
2011	637.1	93.3	169.9	72.5	644.7	442.8	275.3	167.5	157.5
2012	625.4	93.1	169.1	72.0	638.2	451.6	283.3	168.2	161.2
2013	568.8	91.4	167.5	72.7	637.2	457.5	287.0	170.5	164.2
2014	554.1	92.6	166.7	76.0	635.2	463.1	292.1	171.0	161.2
2015	533.1	90.4	168.1	81.9	629.1	474.1	298.7	175.4	161.7
2016	525.7	90.7	171.5	85.4	625.5	485.1	307.1	178.0	164.3
2017	523.9	89.4	171.6	89.4	601.5	494.1	314.9	179.3	166.8
2018	508.1	85.8	172.1	94.3	575.2	501.6	321.1	180.5	166.1
2019	488.9	87.2	175.1	—	558.8	511.4	—	183.3	166.6

Source: World Bank, Poverty and Inequality Platform, https://pip.worldbank.org.
Note: Table shows the number of people living below each country's societal poverty line (SPL) by region, calculated using the poverty rate and population data from the World Bank's World Development Indicators database (https://databank.worldbank.org/source/world-development-indicators). The regional coverage rule is applied (see online annex 1A). See the Poverty and Inequality Platform for a complete series of yearly median consumption/income values used to calculate the SPL based on the formula in box 1.1 in chapter 1. — = not available.

TABLE 1E.1

Global and regional societal poverty line, 1990–2019 *(continued)*

d. Societal poverty line value, by region, 1990–2019 (US$, 2017 PPP)

Year	East Asia and Pacific	Europe and Central Asia	Latin America and the Caribbean	Middle East and North Africa	South Asia	Sub-Saharan Africa	Eastern and southern Africa	Western and central Africa	Rest of the world
1990	2.3	6.9	4.3	4.1	2.2	2.4	—	2.3	19.5
1991	2.3	6.4	4.4	4.0	2.3	2.4	—	2.3	19.6
1992	2.3	5.8	4.4	4.1	2.3	2.4	—	2.2	19.7
1993	2.3	5.3	4.4	4.1	2.3	2.3	2.4	2.2	19.6
1994	2.3	5.1	4.5	4.1	2.3	2.3	2.4	2.2	20.0
1995	2.3	5.4	4.5	4.0	2.3	2.3	2.4	2.2	20.2
1996	2.4	5.2	4.4	4.1	2.3	2.4	2.4	2.2	20.5
1997	2.4	5.3	4.5	4.2	—	2.4	—	2.2	20.9
1998	2.4	5.3	4.6	4.3	—	2.4	2.4	2.2	21.3
1999	2.5	4.8	4.5	4.4	—	2.4	2.4	2.2	21.8
2000	2.5	5.1	4.7	4.6	—	2.4	2.4	—	22.2
2001	2.6	5.2	4.7	4.6	—	2.4	2.4	2.2	22.6
2002	2.7	5.4	4.6	—	2.4	2.4	2.4	2.3	22.9
2003	2.8	5.6	4.7	4.6	2.4	2.4	2.4	2.3	23.0
2004	2.9	6.1	4.9	4.8	2.4	2.4	2.5	2.3	23.3
2005	3.1	6.3	5.1	5.0	2.5	2.4	2.5	2.3	23.5
2006	3.2	6.7	5.5	5.0	2.5	2.5	2.5	2.4	23.9
2007	3.3	7.1	5.7	5.2	2.5	2.5	2.5	—	24.5
2008	3.4	7.7	5.9	5.2	2.5	2.5	2.6	2.4	24.2
2009	3.6	7.6	6.0	5.3	2.6	2.5	2.6	2.4	24.4
2010	3.8	7.9	6.2	5.4	2.6	2.6	2.6	2.5	24.4
2011	4.0	8.1	6.4	5.5	2.7	2.6	2.6	2.5	24.2
2012	4.3	8.2	6.6	5.5	2.8	2.6	2.6	2.6	24.2
2013	4.6	8.4	6.8	5.5	2.8	2.6	2.6	2.6	24.2
2014	4.9	8.5	6.8	5.4	2.8	2.6	2.6	2.7	24.2
2015	5.2	8.3	6.9	5.3	2.8	2.6	2.6	2.7	24.7
2016	5.4	8.4	6.9	5.4	2.9	2.6	2.6	2.7	25.6
2017	5.6	8.7	7.1	5.4	3.0	2.7	2.6	2.7	25.9
2018	5.9	8.8	7.1	5.3	3.1	2.7	2.6	2.8	26.5
2019	6.1	9.1	7.2	—	3.2	2.7	—	2.8	27.4

Source: World Bank, Poverty and Inequality Platform, https://pip.worldbank.org.
Note: Table shows the population-weighted average value of the societal poverty line (SPL) in each region. The regional coverage rule is applied (see online annex 1A for details). See the Poverty and Inequality Platform for a complete series of yearly median consumption/income values used to calculate the SPL using the formula in box 1.1 in chapter 1. — = not available.

Annex 1F

Nowcasts of Global Poverty

Number of additional poor, by region, 2020–22

Year	Poverty line	East Asia and Pacific	Europe and Central Asia	Latin America and the Caribbean	Middle East and North Africa	South Asia	Sub-Saharan Africa	Rest of the world	Global
2020	US$2.15	9	1.0	−1.4	1.3	73	8	0.2	90
2021	US$2.15	10	0.5	−3.1	4.2	58	9	0.2	78
2022	US$2.15	9	1.0	−2.8	5.4	47	11	0.2	70
2022 (downside)	US$2.15	13	1.3	−2.8	5.3	59	14	−0.5	89
2020	US$3.65	29	1.8	−1.0	0.6	120	17	−0.6	167
2021	US$3.65	31	0.9	−5.8	2.6	102	18	−0.2	147
2022	US$3.65	32	2.3	−6.0	2.5	95	20	−0.3	146
2022 (downside)	US$3.65	38	2.9	−4.5	3.7	100	17	−1.0	157
2020	US$6.85	73	4.0	2.7	8.9	56	8	−1.3	152
2021	US$6.85	73	1.5	−7.2	8.1	58	8	−1.4	140
2022	US$6.85	82	12.3	−7.0	7.5	59	10	−0.5	163
2022 (downside)	US$6.85	88	14.3	−4.9	8.2	51	5	−1.0	160

Source: Original calculations based on Mahler, Yonzan, and Lakner, forthcoming; World Bank, Poverty and Inequality Platform, https://pip.worldbank.org; World Bank (2022).

Note: Table shows the number of additional poor in 2020, 2021, and 2022 for various poverty lines under the current projection series—see section "Poverty over the pandemic period: The nowcast" in chapter 1 and Mahler, Yonzan, and Lakner (forthcoming) for more details on the methodology. The estimates of additional poor are calculated as the difference between the number of poor estimated under the COVID-19-induced scenario and the pre-COVID-19 scenario. Estimates for a "downside" scenario report the number of additional poor as the difference between the number of poor estimated under the "Current projection (allowing for food price impacts on poor)" scenario and the pre-COVID-19 scenario in figure 1.12. One number is presented for South Asia using estimates discussed in online annex 1G. Using a GDP based estimate for India in 2020 would reduce the South Asia estimates by 33 million.

References

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Annex 1G

Nowcasting Poverty in 2020 in India

This report includes global and regional poverty estimates based on the household survey data for India for fiscal years 2015/16, 2016/17, 2017/18, 2018/19, and 2019/20 from the Consumer Pyramids Household Survey (CPHS) conducted by the Centre for Monitoring Indian Economy (CMIE), a private data company. This new data source extends Indian poverty estimates to recent years as the last available survey year from which Indian poverty estimates have traditionally been based is 2011 (from the National Sample Survey [NSS]). The household consumption measure used for poverty monitoring is constructed based on the methods described in Sinha Roy and van der Weide (2022). That paper presents two methods of poverty measurement using the CPHS data. Approach 1 imputes household consumption into the CPHS data using common predictors found in both the CPHS and the 2011 NSS. Approach 2 adopts the actual CPHS consumption data; this approach estimates the relationship between CPHS consumption and NSS consumption and uses that estimate to convert observed CPHS consumption into NSS-type consumption. The Indian poverty estimates for 2015–19 are based on approach 2.

The global poverty nowcast for 2020 uses an initial estimate of poverty in India in 2020/21 estimated by Sinha Roy and van der Weide for *Poverty and Shared Prosperity 2022*, implementing the same methodology as set out in Sinha Roy and van der Weide (2022). However, given the official Periodic Labor Force Survey data (PLFS 2020–21), which are needed to conduct the reweighting exercise, were not available until June 2022, and given the challenges of the 2020/21 data (which are discussed in the next section), only approach 1 from Sinha Roy and van der Weide (2022) had been implemented by time of publication. Therefore, the 2020 poverty nowcast for India is based on approach 1.

Full details of the general methods used in approach 1 are in Sinha Roy and van der Weide (2022). This annex provides details on the implementation of approach 1 for 2020/21. It draws on a longer technical note produced for this report by Sinha Roy and van der Weide.

Mahler, Yonzan, and Lakner (forthcoming) detail the use of this estimate for generating global poverty projections for 2020. In sum, the nowcast uses the population distribution of consumption determined with approach 1 for fiscal years 2019/20 and 2020/21. These distributions are used to generate a 2020 calendar year consumption distribution using the standard method for lining up poverty estimates that is used for all global poverty estimates in this report.[1] Consumption growth from 2019/20 to 2020 is then estimated for each rural and urban percentile. Those percentile consumption growth rates are applied to the consumption distribution for 2019/20 in the Poverty and Inequality Platform (which comes from approach 2) to nowcast the consumption distribution in 2020 and generate poverty estimates. Changes from 2019 to 2020 are calculated using the lined-up 2019 numbers in the Poverty and Inequality Platform and the nowcasted 2020 estimates.

Challenges with using approach 1 in 2020/21

Approach 1 is a survey-to-survey (S2S) imputation approach, in which the relationship between consumption and a set of household characteristics is estimated in one survey, and that relationship is used to estimate consumption using the same set of household characteristics in the second survey. S2S imputation approaches tend to emphasize the chronic nature of poverty, in that they are often based on demographic, human capital, and asset variables that change gradually over time and, typically, the relationship between these variables and consumption is stable. Approach 1 in Sinha Roy and van der Weide (2022) also includes selected labor market and consumption category dummies that show more variation over time to increase the ability of the imputation exercise to identify changes in consumption due to short-run economic shocks.

The use of a S2S methodology to estimate changes in consumption is valid under the assumptions that (1) the relationship between the household characteristics and total per capita expenditure is unchanged, and (2) that the key drivers of changes in consumption have been captured well in the time-varying variables included in the imputation model. It is unclear to what extent the first assumption held in 2020 given the unique and large labor market shock that was experienced as well as the significant government response. Therefore, it is not clear in which direction the bias will go. If the second assumption is not valid for 2020, then the S2S method underlying approach 1 mutes the impact of the shock.

The size and nature of any bias in approach 1 can be assessed by a comparison with approach 2, which does not rely on these assumptions. However, approach 2 has not been fully implemented and, more importantly, has its own challenges, such as determining how to value an in-kind government response. For this reason, the *Poverty and Shared Prosperity 2022* bases the India nowcast on approach 1 with the acknowledgment that this estimate is provisional and may be subsequently revised up or down as work continues.

Reweighting in 2020/21

Following Sinha Roy and van der Weide (2022), a two-stage reweighting process was used to make the CPHS sample more representative of India as a whole. National Family Health Survey (NFHS) 5 was used as the first benchmark survey, and PLFS 2020–21 was used as the second benchmark survey. The set of target variables used for reweighting was modified to achieve better balance for 2020–21 with respect to both benchmark surveys (for both target and nontarget variables).

For the first stage (using NFHS 5), the target variables include owning air conditioning, a car, computer, refrigerator, television, two-wheeler, and washing machine; having a dwelling with a pucca wall; and having a dwelling with a pucca roof. In the second stage (using PLFS), the target variables include being casually employed, having a household size of one or two, having a household size of three or four, the share of adults in the household that are salaried workers or self-employed, the share of nonliterate adults in the household, the share of adults with primary schooling, the share of adults with secondary schooling, and the share of adults with higher secondary schooling.

Convergence rates are 75 percent of sample for stage 1, 92.5 percent of sample for stage 2, and 95.7 percent convergence at either of the two stages. Table 1G.1 presents summary statistics after reweighting. This is for a sample that excludes the households in the 2020/21 CPHS that were interviewed by phone, as discussed in the next section.

TABLE 1G.1

Summary statistics of reweighted CPHS sample and official survey data

	CPHS	PLFS	NFHS-5
Target variables in the reweighting process			
Share of population (age 15+) that is (percent):			
Salaried	10.4	10.6	—
Casual	9.9	10.5	—
Self-employed	24.7	26.5	—
Share of population that is living in a household of (percent):			
1–2 people	9.4	8.1	—
3–4 people	39.3	38.7	—
5 or more people	51.3	48.0	
Share of population (ages 15–49) with education level (percent):			
Nonliterate and below primary	13.5	19.9	—
Primary	10.1	11.2	—
Secondary	40.9	39.1	—
Higher secondary	18.0	14.8	—
Graduate and above	17.4	14.9	—
Share of the population living in a household that has (percent):			
Air conditioning	15.1	—	25.4
Car	9.2	—	7.9
Computer	9.9	—	9.4
Refrigerator	43.9	—	38.9
Television	77.5	—	68.8
Two-wheeler	61.2	—	54.0
Washing machine	21.6	—	18.6
Pucca roof	76.4	—	69.2
Pucca wall	86.3	—	78.7
Other variables			
Share of population that is (percent):			
Scheduled tribe	9.6	9.6	—
Scheduled caste	23.7	20.8	—
Other backward caste	40.3	44.1	—
Other caste	26.4	25.5	—
Share of population that is (percent):			
Hindu	85.5	82.7	—
Muslim	10.3	12.0	—
Christian	1.4	2.3	—
Sikh	2.2	1.6	—
Jain	0.1	0.2	—
Buddhist	0.5	0.7	—
Share of population living in (percent):			
An extended household	2.7	5.8	—
A female-headed household	37.0	33.4	—

(continued)

Summary statistics of reweighted CPHS sample and official survey data *(continued)*

	CPHS	PLFS	NFHS-5
Other variables			
Share of population that is (percent):			
Age 0 to 18	26.5	32.7	—
Age 61 or older	8.5	8.6	—
Worker population (age 15+) ratio	44.6	47.6	—
Share of employed (age 15+) that are (percent):			
Salaried	23.4	22.3	—
Casual	22.1	22.1	—
Self-employed	54.5	55.6	—
Share of population (age 15+) that is (percent):			
Looking and willing to do work	3.9	3.9	—
Out of labor force	51.5	48.5	—

Source: Calculations by Sinha Roy and van der Weide using reweighted CPHS 2020–21, PLFS 2020–21, and NFHS-5 using reweighting methods outlined in Sinha Roy and van der Weide (2022).
Note: Statistics for NFHS-5 are presented for all states but similar results are found using only phase 2 states where surveys were conducted in 2020–21. Target variables are variables that were targeted for matching during the reweighting process; see Sinha Roy and van der Weide (2022) for details. CPHS = Consumer Pyramids Household Survey; PLFS = Periodic Labor Force Survey; NFHS-5 = National Family Health Survey 5; — = variable not used from this survey.

The impact of phone surveys in 2020/21

The CPHS was continuously fielded in fiscal year 2020/21, even during the emergence of the COVID-19 pandemic and the start of lockdowns. During this turbulent period, CMIE switched many of the planned interviews from a face-to-face format to a phone-based interview, which affected response rates as well as, possibly, the quality of responses. The response rates and share of interviews conducted by phone in each round are presented in table 1G.2. After reweighting, phone surveys make up 40 percent of the weighted sample (when left in the sample).

The move to conducting interviews over the phone during the pandemic introduces two challenges. First, it may alter the population that is captured by the CPHS survey, especially if the response declines are different for different groups. Second, it can alter the consumption expenditure data that is collected for each household. Consumption measures are fairly sensitive to mode of data collection (Beegle at el. 2012) and this appears to also apply to a comparison of face-to-face versus phone collection (Abate et al. 2021). The first issue of sample composition is largely addressed by adjusting the survey weights. The second issue is more challenging. While poverty estimates obtained with approach 2 from Sinha Roy and van der Weide (2022) will be more sensitive to this change in consumption data, estimates obtained with approach 1 from Sinha Roy and van der Weide (2022) are also affected. This is because the regression model underlying approach 1 features consumption category dummies to increase the model's ability to pick up short-term changes in household welfare.

The coincidence of phone surveys with the most severe period of the lockdown presents a difficult challenge. Omitting phone surveys could reduce the estimated poverty increase by removing an important source of information in wave 2 of 2020 at the height of the lockdown period. However, if switching from face-to-face to phone-based interviews resulted in a systematic underreporting of consumption (as was found for a phone-based survey of consumption in urban Ethiopia [Abate et al. 2022]), then including the phone surveys will lead to an overestimation of poverty even for a well-balanced sample. Table 1G.3 shows how survey mode affects the share of households reporting zero expenditure on the consumption categories that are included

Response rate and share of surveys completed by phone, by wave, FY 2020/21

	Wave 2 (May to August 2020)	Wave 3 (September to December 2020)	Wave 1 (January to April 2021)	Average
Response rate (percent)	43.8	70.6	73.4	62.6
Surveys completed by phone (percent)	45.1	6.3	2.4	13.8

Source: Centre for Monitoring Indian Economy.

Impact of phone surveys on reported consumption

	Urban				Rural			
	Clothing	Books	Furniture	Appliances	Clothing	Books	Furniture	Appliances
Phone survey	–0.138***	–0.0253	–0.0229***	–0.0527***	–0.165***	–0.0551***	–0.0164***	–0.0241***
	(–5.80)	(–1.22)	(–5.35)	(–7.95)	(–4.90)	(–2.80)	(–3.80)	(–4.91)
Wave 2 (May to August 2020)	–0.0908***	–0.0894***	0.0127***	–0.00135	–0.0543	–0.167***	0.00133	0.00203
	(–3.88)	(–4.20)	(2.58)	(–0.14)	(–1.35)	(–6.93)	(0.30)	(0.29)
Wave 3 (September to December 2020)	0.0893***	–0.0785***	0.0455***	0.0111	0.130***	–0.0857***	0.0116**	0.0148*
	(5.08)	(–5.21)	(5.23)	(1.16)	(4.44)	(–3.76)	(2.24)	(1.86)

Source: Calculations by Sinha Roy and van der Weide using reweighted Consumer Pyramids Household Survey (CPHS) 2020–21 using reweighting methods outlined in Sinha Roy and van der Weide (2022).
Note: Estimates from an unweighted ordinary least squares regression of household characteristics, survey mode, and wave of survey on dummies for spending on clothing, books, furniture, and appliances, respectively, with separate estimates for urban and rural India. The omitted wave is 2021, wave 1. Other household controls (results not shown) include household size and demographics, education of household members, religion, caste, house ownership, access to electricity, asset ownership, and sector of employment. * = significant at 10 percent; ** = significant at 5 percent; *** = significant at 1 percent.

in the survey-to-survey model in approach 1.[2] This increase in the "zero consumption" response is present even when controlling for survey round and respondent characteristics. In many cases the survey mode effect on the share of zeros reported is larger than the round effect. Important to note, most coefficients on most other covariates do not change based on survey mode (such as increase in unemployment and reduction in television ownership).

Given the apparent strong impact of survey mode on these questions in this context, phone surveys are dropped from the sample of observations. Thus, the sample used was obtained as follows. First, observations conducted over the phone were dropped. Second, one wave was randomly chosen out of three possible waves in a year (as is done in Sinha Roy and van der Weide [2022] to facilitate comparisons with the NSS). Third, CPHS survey weights are adjusted as described previously. The FY 2020/21 CPHS counts 153,088 unique households. Dropping interviews conducted over the phone (and then drawing 1 wave per household in the year) yields a sample size of 145,096 unique households. Thus, 7,992 households were never interviewed in person during FY 2020/21 and are therefore not included in the sample prior to reweighting. This group of households represents 5.2 percent of all household interviews in FY 2020/21.

Alternate estimates and further work

Foregoing telephone interviews results in dropped observations primarily from wave 2 of data collection in 2020, and thus raises the concern that household interviews are being excluded from a period when vulnerability was high. While there is a clear survey mode effect, and including all households would likely overestimate the increase in poverty, the strategy of

dropping all phone surveys also likely overcorrects for this problem. The reason is intuitive: including phone surveys includes the survey mode effect as part of the decline in consumption, whereas excluding phone surveys assumes that all of the reduction in consumption is due to the survey mode effect. Both assumptions are extreme and therefore are likely to result in estimates that bracket the true decline in consumption.

Table 1G.4 shows the change in the share of households that reported spending on specific consumption categories, both for the full weighted sample and for the weighted face-to-face sample. The final column presents estimates for the full sample, but reduces the change reported by phone survey households using the survey mode coefficients presented in table 1G.3. This adjustment is a simple calculation and does not necessarily represent a true estimate of the change—more work needs to be done to determine the size of the survey mode effect and to correct for this in the estimation. However, this exercise does illustrate that the true change in consumption share is (1) likely to be in between the share calculated for all households and the share calculated for face-to-face survey households only, and (2) likely to be closer to the share calculated for face-to-face survey households only.

The impact of dropping phone surveys is also examined by re-estimating headcount poverty using the full sample (including phone surveys, table 1G.5). The set of target variables used to reweight the full sample is the same with the exception of excluding the share of adult household members with higher secondary education (excluding this in the full sample slightly improves balance). Including phone survey responses results in a substantially higher estimated poverty rate. A model that excludes the consumption dummies was also estimated.

TABLE 1G.4

Consumption changes with and without phone surveys

	Change in share from FY 2020 to FY 2021		
	All surveys	**Face-to-face surveys**	**All surveys, but using a simple adjustment for a phone survey effect**
Share of households that reported spending on (percent):			
Clothing, footwear, accessories	–20.6	–10.0	–14.4
Books, newspapers, stationery, tuition, hobbies	–27.7	–20.5	–25.9
Furniture and fixtures	–2.4	–1.4	–1.7
Cooking and household appliances	–7.3	–4.9	–5.9

Source: Calculations by Sinha Roy and van der Weide using reweighted Consumer Pyramids Household Survey (CPHS) 2020–21 using reweighting methods outlined in Sinha Roy and van der Weide (2022).
Note: The final column uses the coefficients in table 1G.3 for each category to approximate where the "true" drop in consumption might be, assuming an urban share of 35 percent and phone surveys as 40 percent of the weighted sample.

TABLE 1G.5

Estimated poverty rate (US$2.15 a day) for FY 2020/21 for different sample and model specifications

	Selected approach	**Check 1**	**Check 2**
India	14.3	17.8	14.0
Rural	15.7	19.3	15.6
Urban	11.0	13.8	9.8
Sample	Phone surveys dropped	Full	Full
Model	Full	Full	Consumption dummies dropped

Source: Calculations by Sinha Roy and van der Weide using reweighted Consumer Pyramids Household Survey (CPHS) 2020–21 using reweighting methods and approach 1 outlined in Sinha Roy and van der Weide (2022).

This model produces estimates of poverty that are close to the estimates obtained with the sample that excludes phone surveys but includes the consumption dummies.

Further work will be needed to better understand the impact of phone surveys on poverty measurement and how best to correct for possible biases. The current India nowcast for 2020 ignores the information collected by phone, which might undercount the poor. However, including the phone surveys without adjustment would likely lead to an overcount of the poverty increase in India in 2020.

Notes

1. See the Poverty and Inequality Platform Methodology Handbook sections on interpolation (section 5.2) and national accounts (section 5.3) in the discussion of lineup estimates for details on how this conversion is done (https://worldbank.github.io/PIP-Methodology/lineupestimates.html#interpolations).

2. The survey records expenditure on each category of goods, which is then converted into a zero or 1 dummy by coding all non-zero expenditures as 1. This can be contrasted with the survey used in Abate et al. (2021) in which a binary question on whether a household consumed (or spent money on) a given category was asked first, and then, for those that responded yes to the first question, a subsequent question on how much was consumed (or spent) was asked. In the Abate et al. (2021) analysis, indicators based on the binary questions did not show a survey mode impact, whereas indicators based on amount consumed did.

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