

# Setbacks to Ending Extreme Poverty

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ACCELERATING GLOBAL ACTIONS FOR A WORLD WITHOUT POVERTY  
UN INTERAGENCY EXPERT GROUP MEETING  
THIRD UN DECADE FOR THE ERADICATION OF POVERTY

UN ECONOMIC COMMISSION FOR AFRICA  
ADDIS ABABA, MAY 10-12, 2023



Poverty & Inequality Platform

**THE WORLD BANK**  
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*Financial support from the UK government through the Data and Evidence for Tackling Extreme Poverty (DEEP) Research Programme is gratefully acknowledged.*

*Findings in these slides reflect the work of many people, including but not limited to, Andres Castaneda Aguilar, Samuel Tetteh Baah, Dean Jolliffe, Christoph Lakner, Daniel Mahler, Marta Schoch, Martha Viveros, Nishant Yonzan. The findings, views, interpretations in this presentation do not necessarily represent the views of the World Bank and its affiliated organizations, or those of the Executive Directors of the World Bank or the governments they represent.*

# Outline

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- I: Profile extreme poverty – concepts, history, forecasts
- II: Casting a wider net, alternative concepts to extreme poverty
- III: Improving communication around extreme poverty estimates

# I: Global profile of extreme poverty

# What is extreme poverty?

- Individuals are said to live in extreme poverty if they **consume** less than **\$2.15** per day
- Where does \$2.15 come from? Most countries have *national* poverty lines.
- These lines indicate the minimum cost of covering basic caloric needs and a few non-food items, such as clothes and shelter
- \$2.15 is the median national poverty line of some of the poorest countries, the set of Low-income Countries (LICs)
- Hence it identifies what a typical poor country thinks it takes to cover basic needs



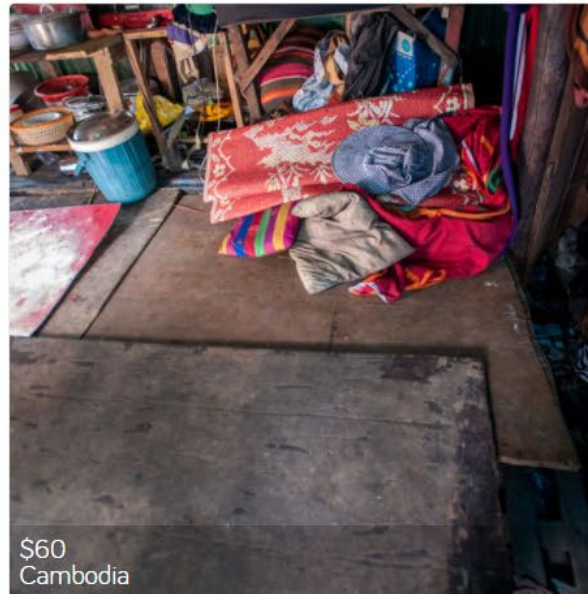
# What is extreme poverty?

- What does it mean to **consume** less than \$2.15 per day?
- To estimate extreme poverty in a country, we rely on household surveys
- These surveys ask a representative sample of households about their recent consumption patterns.
- If the total value is less than \$2.15 per person per day, the household is said to be in extreme poverty
- *Caveat:* high-income countries typically don't measure households' consumption but rather households' disposable incomes.



# What does it mean to live on \$2.15 per day (2017 PPPs)?

- Here are, for example, the beds of three households living on about \$2.15 per day (about \$65 per month in 2017 PPPs) from [www.gapminder.org](http://www.gapminder.org) 'dollar-street' which shows the living conditions of households around the world based on their monthly consumption



# The international poverty line

- Since the introduction in 1990 of the 'dollar-a-day' international poverty line, the World Bank has monitored poverty using an international poverty line.
- The international poverty line reflects the typical national poverty line of some of the poorest countries in the world.
- These national poverty lines typically indicate the minimum cost of covering basic food and nonfood needs.
- People living on less than the international poverty line are in extreme poverty.
- This measure of poverty is used for the *first* of the World Bank's twin goals and for the *first* indicator of the Sustainable Development Goals.





# Purchasing power parities and the international poverty line

- National poverty lines and household consumption are reported in local currencies. Purchasing power parity (PPP) exchange rates convert them to the same currency and account for price differences faced by people better than market exchange rates.
- New PPPs are collected periodically, most recently in 2017. When PPPs are updated, so too is the international poverty line.

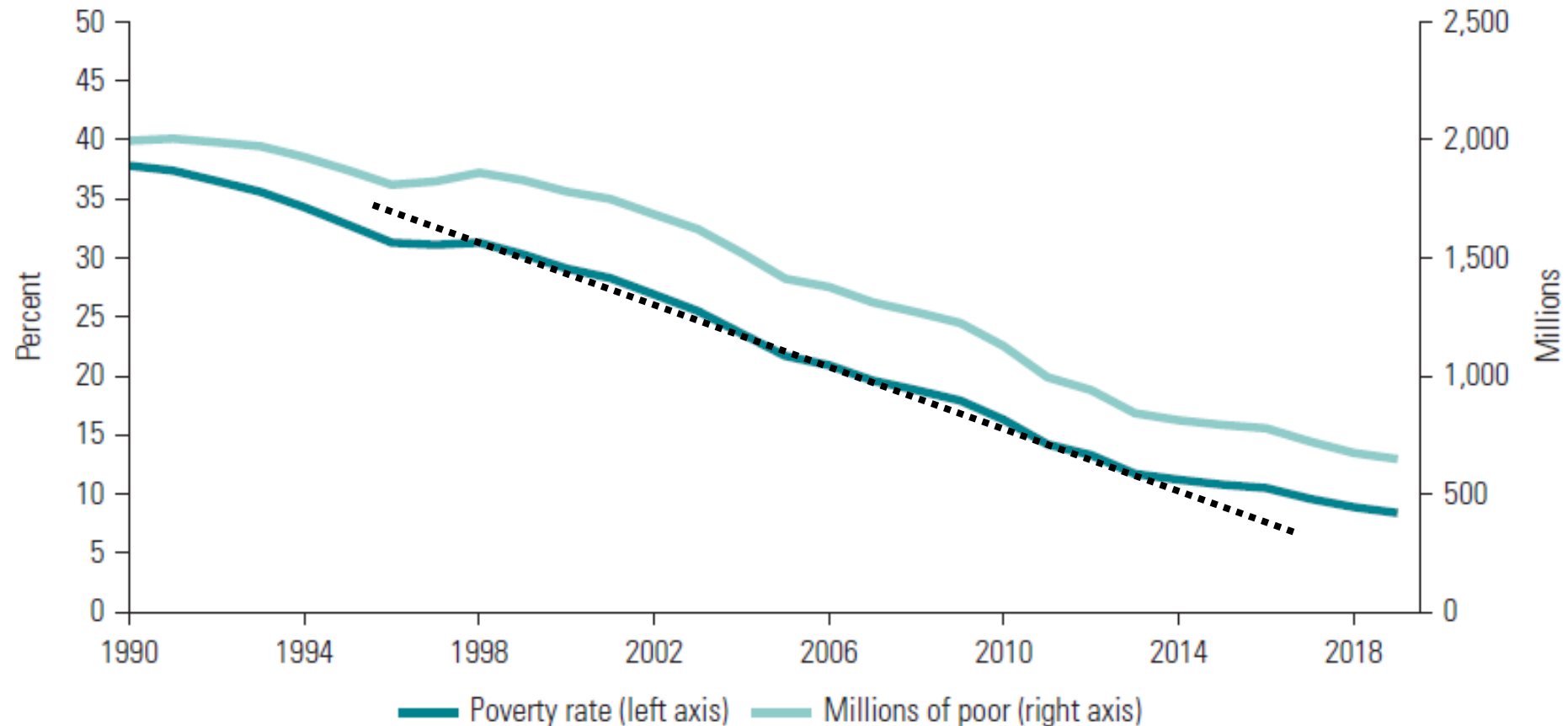
Source	World Bank (1990)	Chen and Ravallion (2001)	Ravallion et al. (2009)	Ferreira et al. (2016)	Jolliffe al. (2022)
ICP Data (PPPs)	1985	1993	2005	2011	<b>2017</b>
Method	Inspection (rounded)	Median	Mean	Mean (rounded)	<b>Median</b>
International Poverty line (ICP year USD)	\$1.01 (\$1.00) "Dollar-a-day"	\$1.08	\$1.25	\$1.88 (\$1.90)	<b>\$2.15</b>
Countries used in sample	Bangladesh, Indonesia, Kenya, Morocco, Nepal, Pakistan, Philippines, Tanzania	Bangladesh, China, India, Indonesia, Nepal, Pakistan, Tanzania, Thailand, Tunisia, Zambia	Chad, Ethiopia, The Gambia, Ghana, Guinea-Bissau, Malawi, Mali, Mozambique, Nepal, Niger, Rwanda, Sierra Leone, Tajikistan, Tanzania, Uganda	Same as Ravallion et al.(2009) (15 countries)	<b>28 low-income countries</b>



# Method for setting the international poverty line

- **Previously:** \$1.90 poverty line (2011 PPPs) and \$1.25 poverty line (2005 PPPs) were derived as the average national poverty line of *15 poor countries*
- **Now:**
  - Larger, newer, more comparable sample of national poverty lines
  - International Poverty Line = median national poverty line for low-income countries, \$2.15 in 2017 PPPs
  - + higher lines derived as median national poverty line of LMICs and UMICs
  - Using the new data set and the 2011 PPPs also resulted in a poverty line of \$1.90 in 2011 PPPs.
- Technical details in WB Policy Research Working Paper [no. 9941](#)

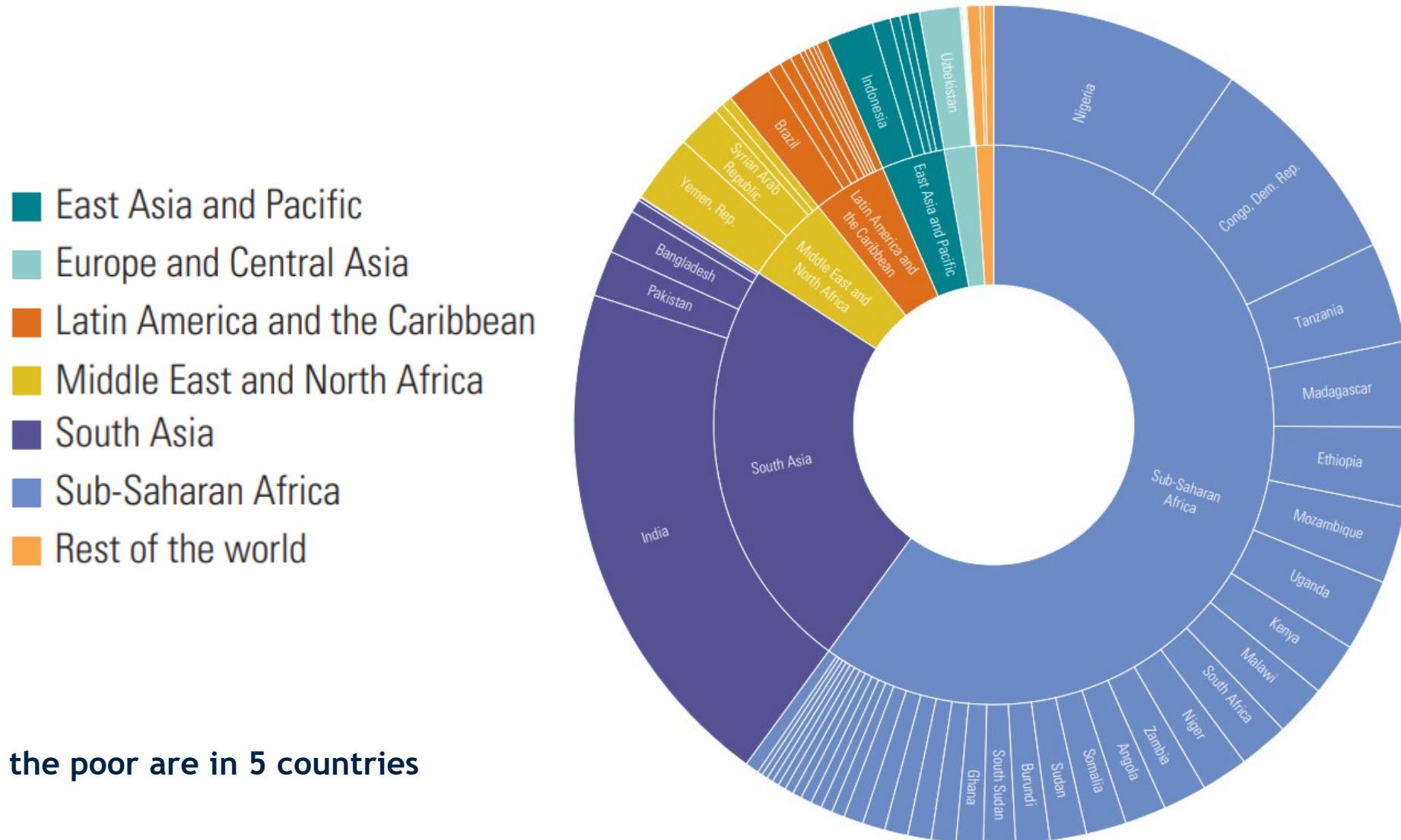
# 1990 – 2014: remarkable progress in reducing poverty After 2014, significant slowdown



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

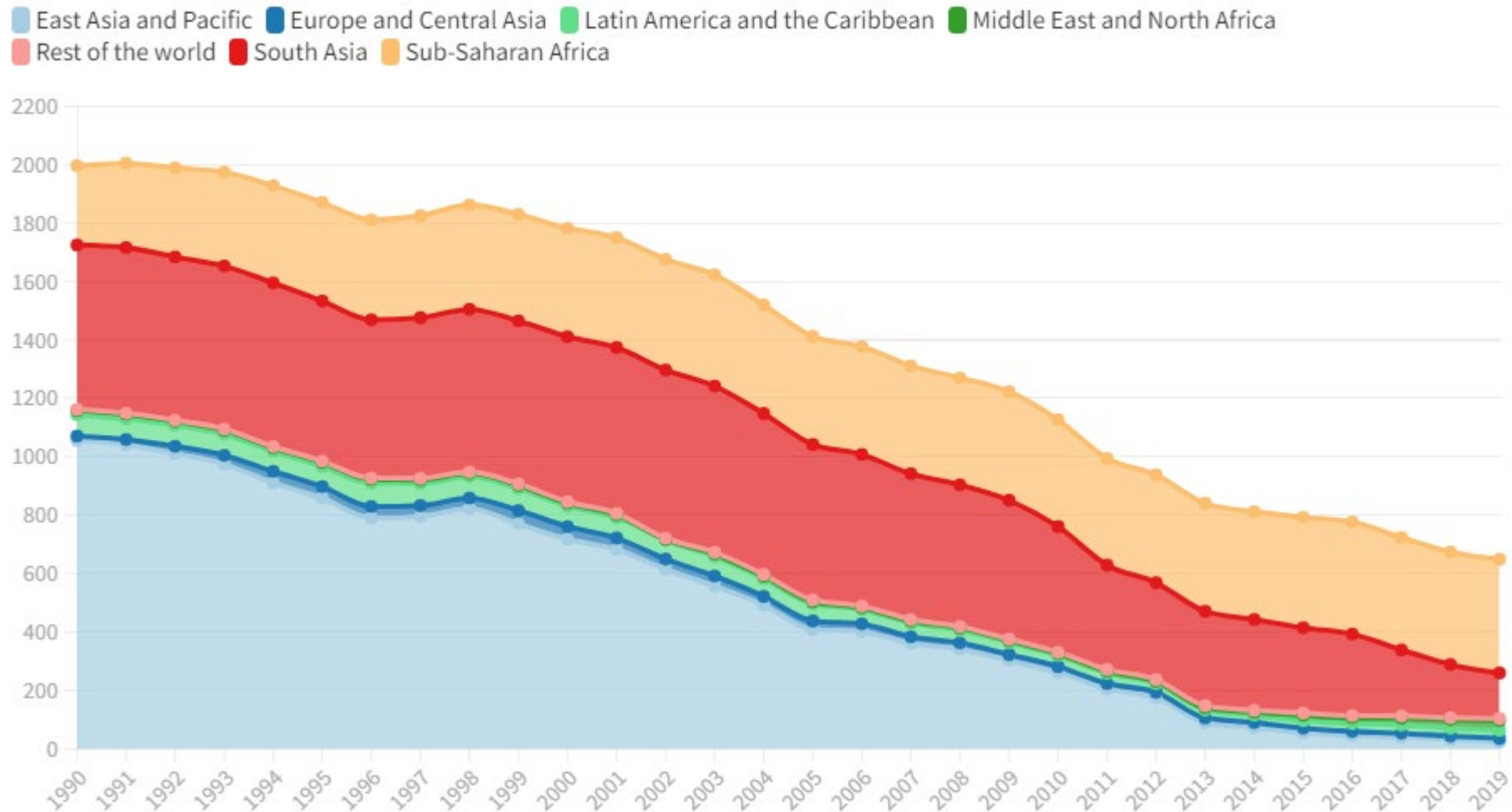
Note: The figure shows the poverty rate and number of poor at the international poverty line of US\$2.15 (2017 PPP) per person, per day. See box 1.1 for more details on the adoption of 2017 PPPs that are used for monetary poverty measures throughout the chapter. PPP = purchasing power parity.

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



Half the poor are in 5 countries

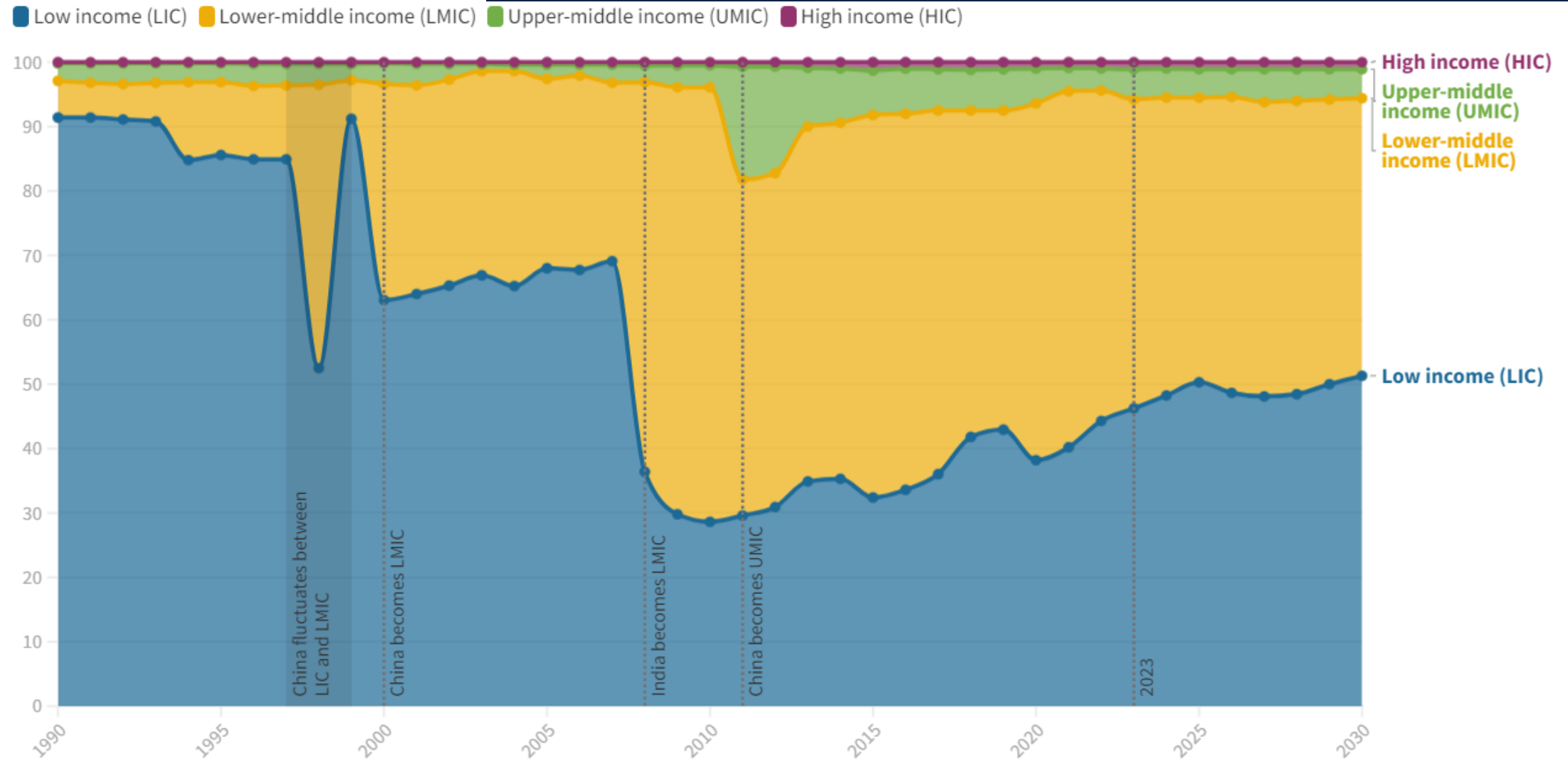
# Three decades ago, the majority of the world's poor lived in East Asia & Pacific



Source: <https://blogs.worldbank.org/developmenttalk/end-extreme-poverty-getting-back-pre-covid-19-reduction-rates-not-enough>

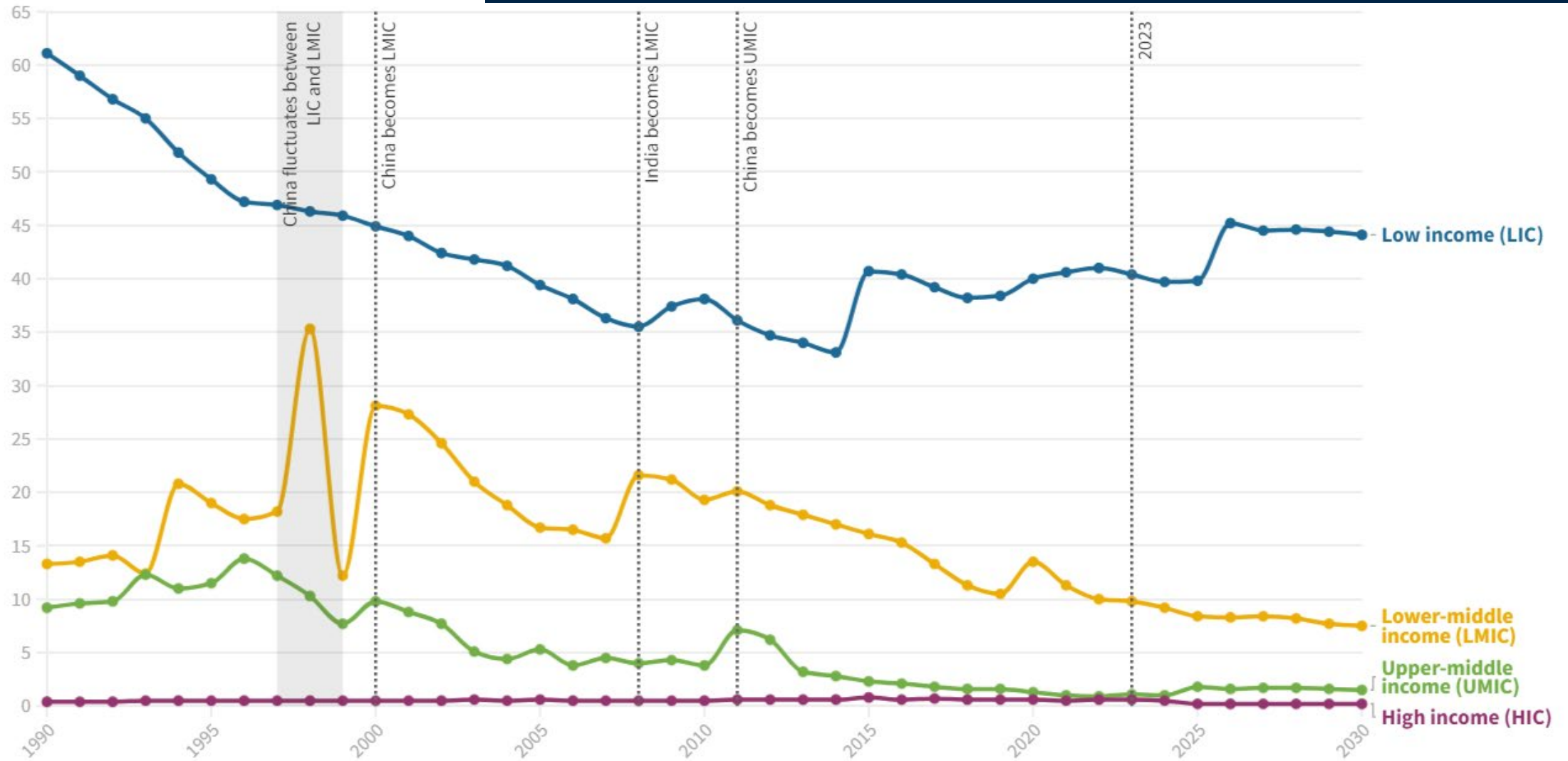
Share of global poor (%), evolving classification

# Poverty population by income level



Source: [Poverty and Inequality Platform, Historical income classifications](#) • The figure shows the share of the global extreme poor (measured at the international poverty line of \$2.15 per person per day) by country income group. The 'evolving' income group classification changes from year to year. Classifications refer to fiscal years (FY) and are here matched to the year of their release. For example, the FY23 classification, released in July 2022, is here tied to 2022. The 'current' income group classification uses the FY23 classification in the entire graph.

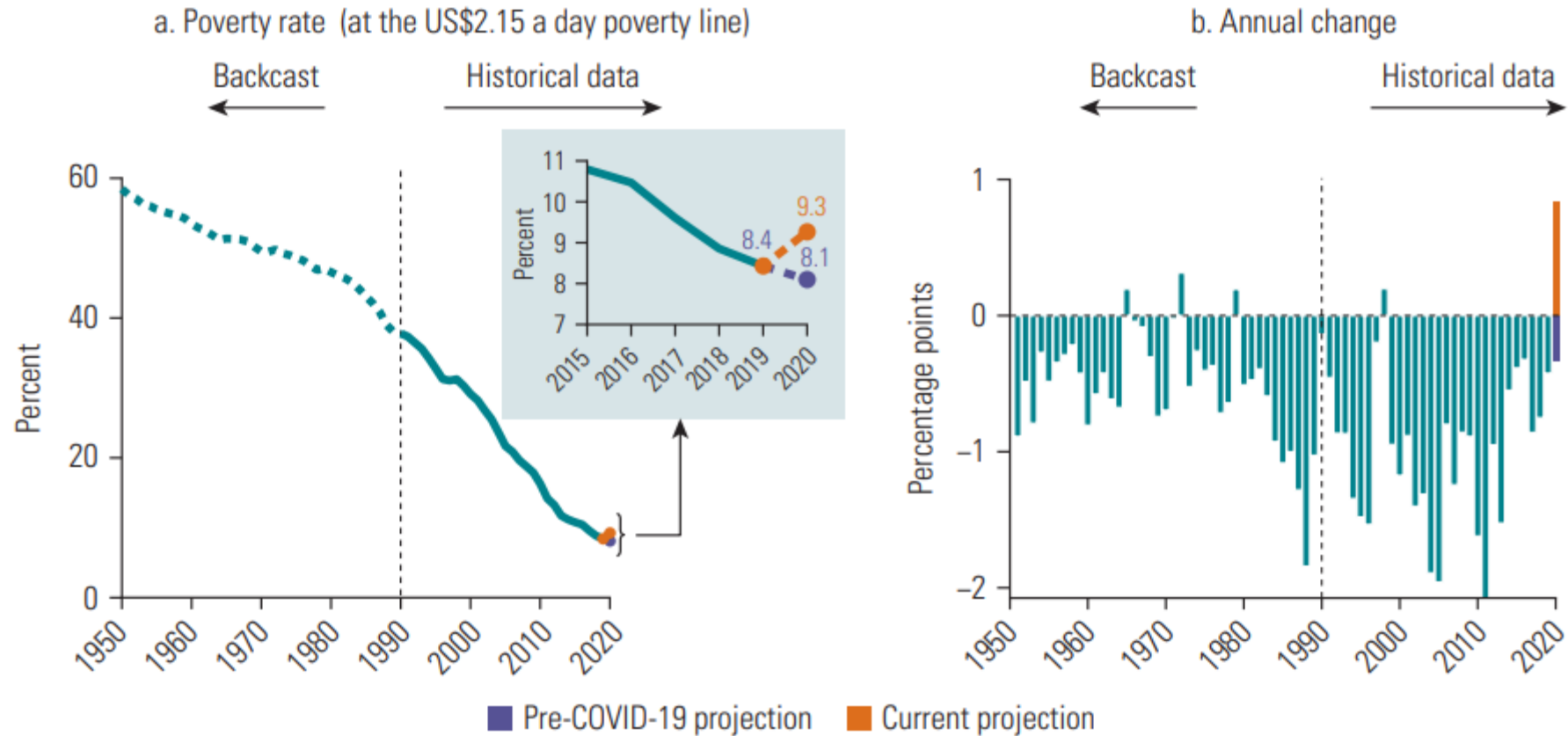
# Poverty rate by income level



Source: [Poverty and Inequality Platform, Historical income classifications](#) • The figure shows the extreme poverty rate (measured at the international poverty line of \$2.15 per person per day) by country income group. The 'evolving' income group classification changes from year to year. Classifications refer to fiscal years (FY) and are here matched to the year of their release. For example, the FY23 classification, released in July 2022, is here tied to 2022. The 'current' income group classification uses the FY23 classification in the entire graph.



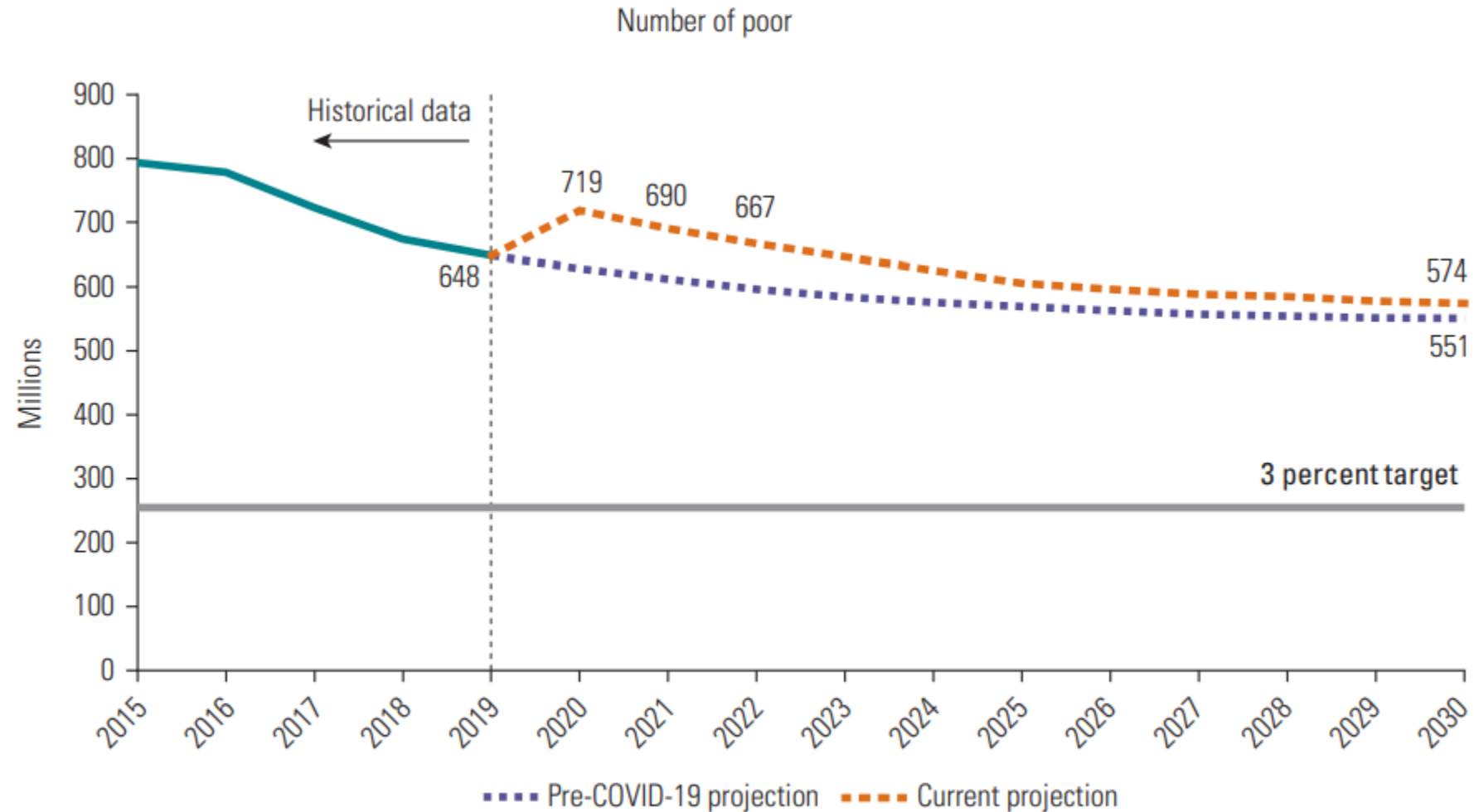
# The COVID-19 pandemic was a historic shock to global poverty



Source: 2022 Poverty and Shared Prosperity Report and Mahler, Yonzan, Lakner. 2022. "The Impact of COVID-19 on Global Inequality and Poverty." World Bank Policy Research Working Paper 10198.



# Forecasting poverty reduction: Completely off path to 3% by 2030



II: Other concepts of poverty (a few of many)

# Limitations of the \$2.15 line

The \$2.15 poverty line is a **frugal**, **absolute**, and **monetary** standard for measuring poverty. Many people who live on more than \$2.15 per day could be considered poor, for example:

## Higher standards

An individual who lives on less than \$3.65 or \$6.85 day

## Relative standards

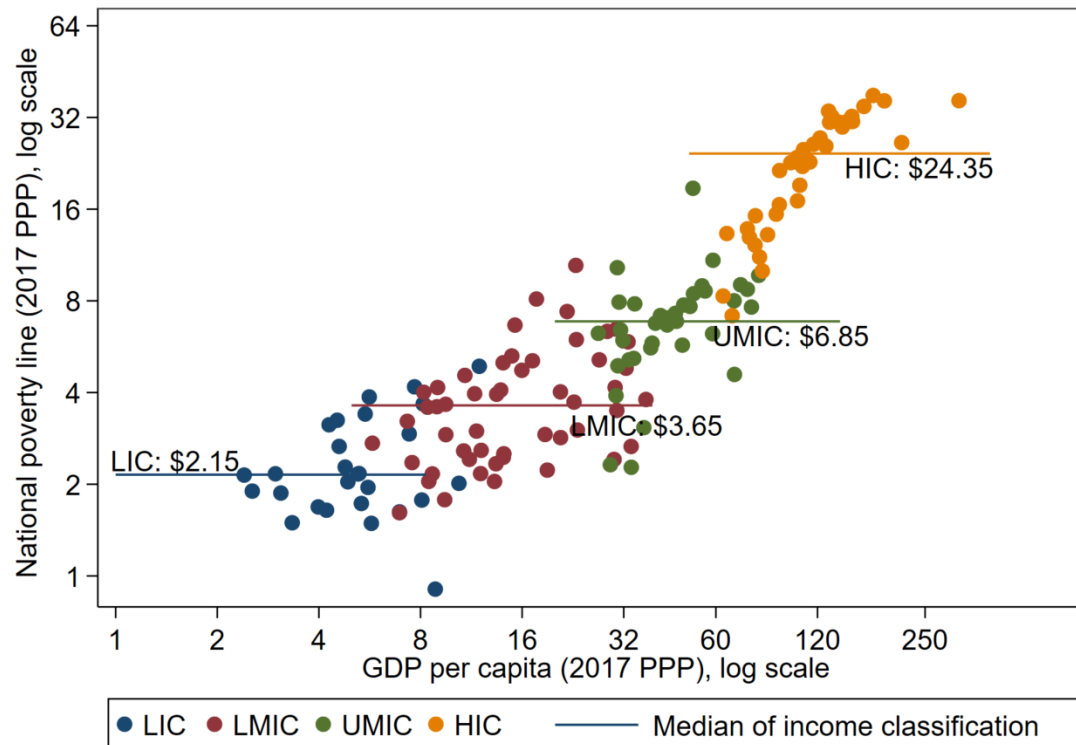
An individual who lives on \$5 a day in a society where the typical person lives on \$50 a day

## Non-monetary standards

An individual who lives on \$3 a day but lacks access to basic infrastructure, basic education, and health services

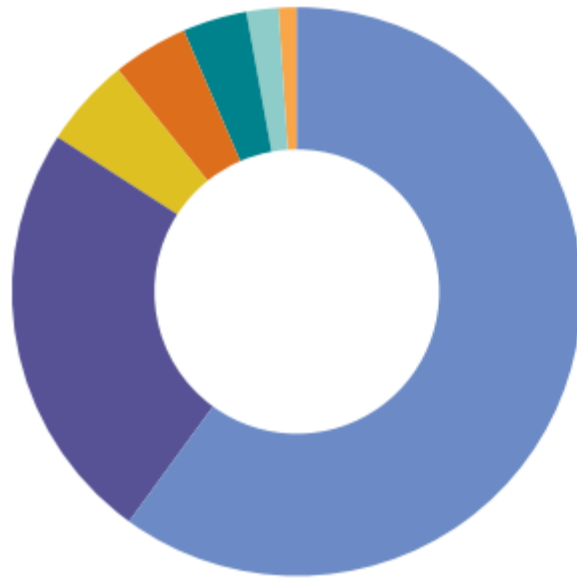
# Global poverty lines, 2011 & 2017 PPPs

Income classification	Median (\$) (2011 PPP)	Rounded	Observations	Median (\$) (2017 PPP)	Rounded	Observations
Low income (LIC)	1.91	<b>1.90</b>	33	<b>2.15</b>	<b>2.15</b>	28
Lower-middle income (LMIC)	3.21	<b>3.20</b>	32	<b>3.63</b>	<b>3.65</b>	54
Upper-middle income (UMIC)	5.48	<b>5.50</b>	32	<b>6.85</b>	<b>6.85</b>	37
High income (HIC)	21.7		29	24.36	<b>24.35</b>	38

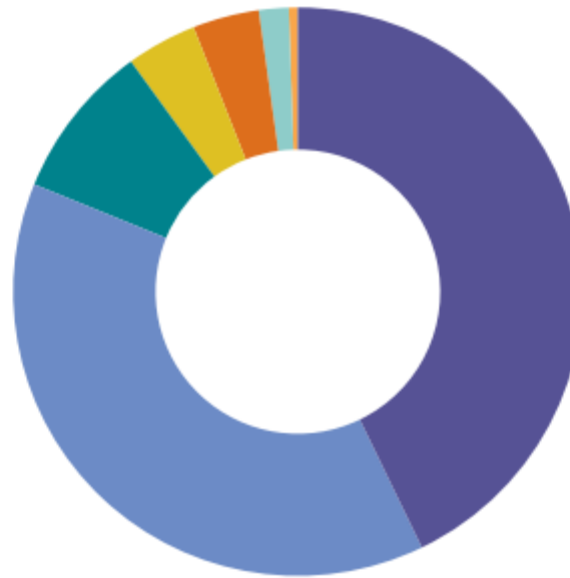


# At higher poverty lines, the regional distribution of the global poor changes

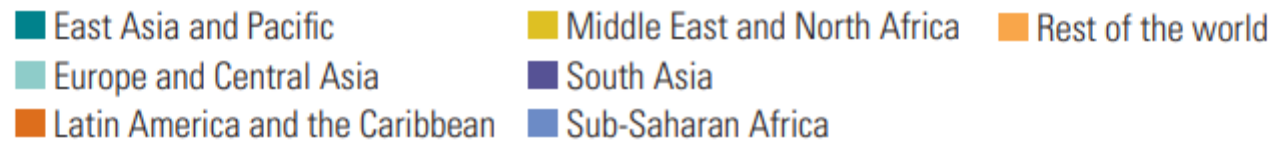
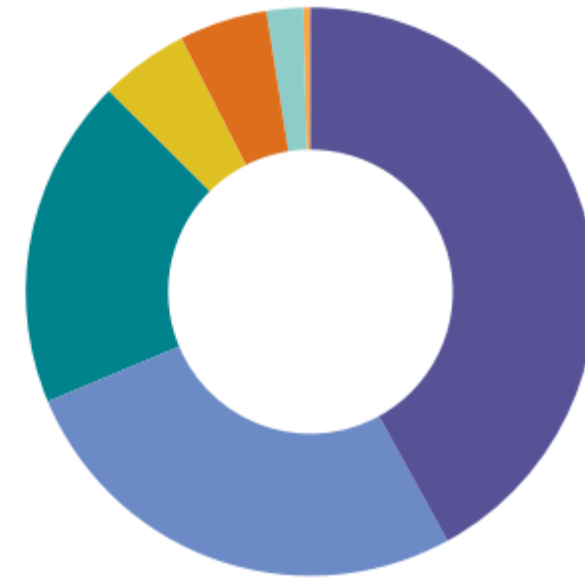
a. Number of poor, US\$2.15



b. Number of poor, US\$3.65



c. Number of poor, US\$6.85



# Relative standards

Societal poverty: Using a poverty line that increases as countries get wealthier

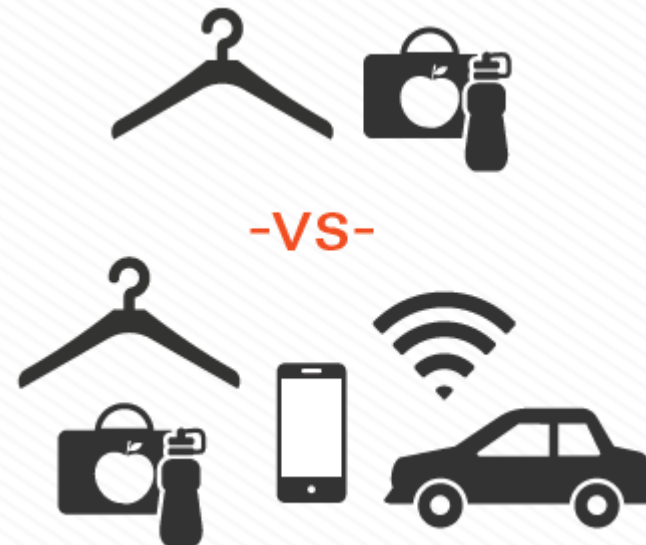
- Societal poverty reflects idea that as countries get wealthier, the standard of meeting basic needs increases.
- The wealthier a country, the more resources one needs not to avoid social exclusion.
- The World Bank introduced the societal poverty line (SPL) in 2018:

$$SPL = \max[2.15, 1.15 + 0.5 * \text{median}]$$

## ESTABLISHING A NEW SOCIETAL POVERTY LINE

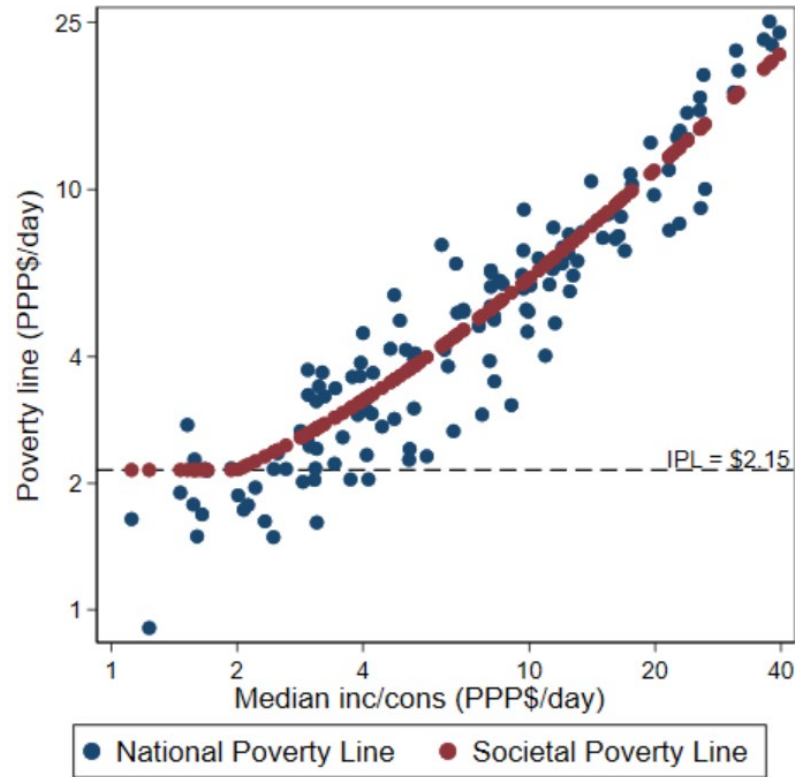
### Being poor is relative.

In a poor country, one may only need clothing and food to perform work, whereas in a richer society, one may also need access to internet, a phone, and a vehicle.

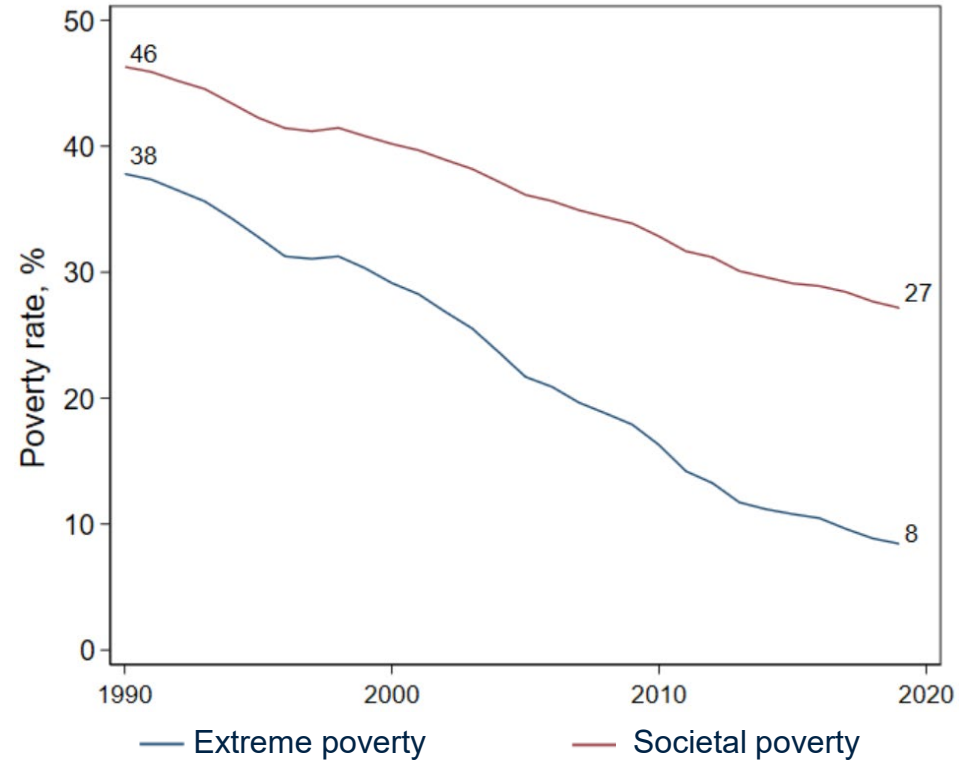


# Societal poverty declines more slowly than extreme poverty

How countries define basic needs increases with income



Societal poverty declines more slowly with growth because the poverty line increases



**Societal poverty more than 3 times extreme poverty**

- The societal poverty line reflects average assessments of social & economic basic needs at different levels of development.  $SPL = \max(\$2.15, \$1.15 + 0.5 \times \text{Median})$

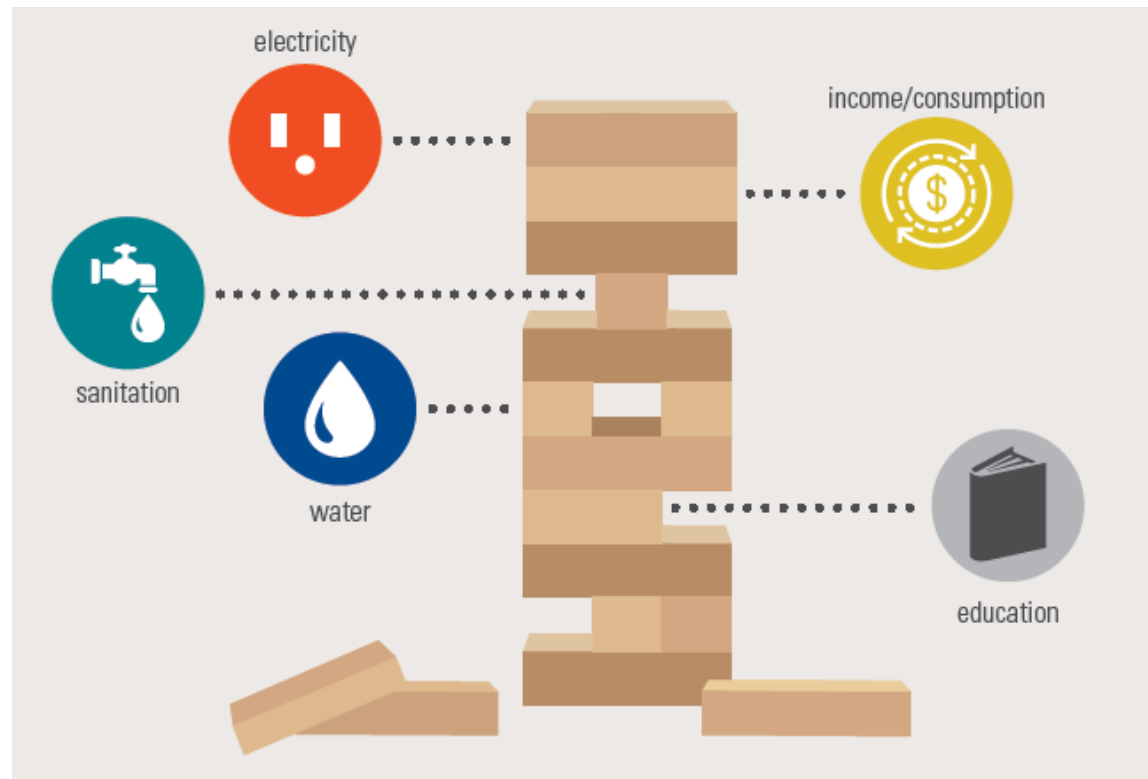


# Non-monetary standards

- The \$2.15 poverty line largely does not account for dimensions of well-being that do not have a market price, e.g., education and basic infrastructure often provided by the state.

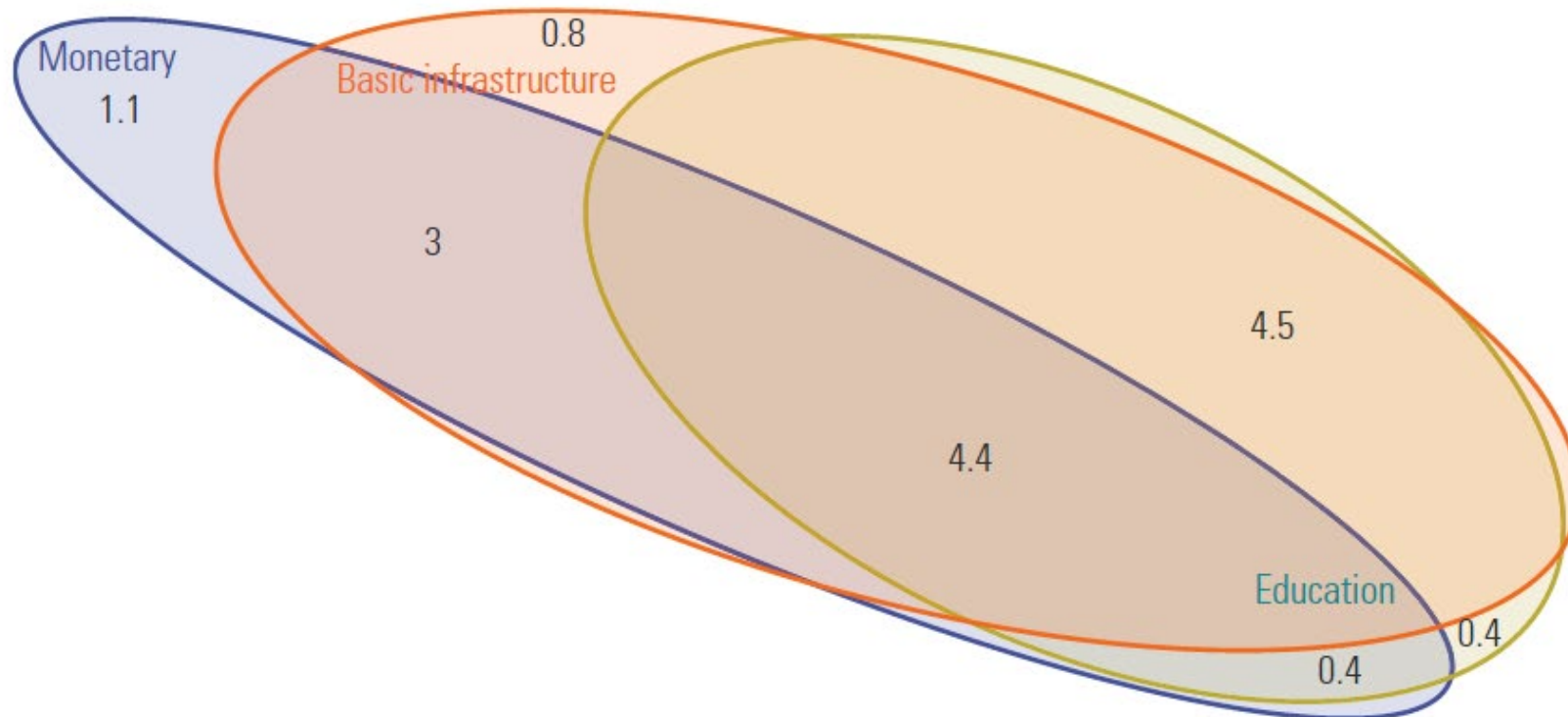
- In 2018, the World Bank introduced a measure of multidimensional poverty

- Monetary poverty remains one of its dimensions



# Almost 40% of the multidimensionally poor are not monetarily poor

Venn diagram of deprivations



Source: 2022 Poverty and Shared Prosperity Report

III: Efforts to improve understanding of the poverty estimates (Trust, Equity, Value)

OFFICE OF THE WORLD BANK CHIEF STATISTICIAN AND THE POVERTY & EQUITY GLOBAL PRACTICE



## ACCESSING THE WORLD BANK'S ESTIMATES OF POVERTY AND INEQUALITY

How to use the World Bank's Poverty and Inequality Platform

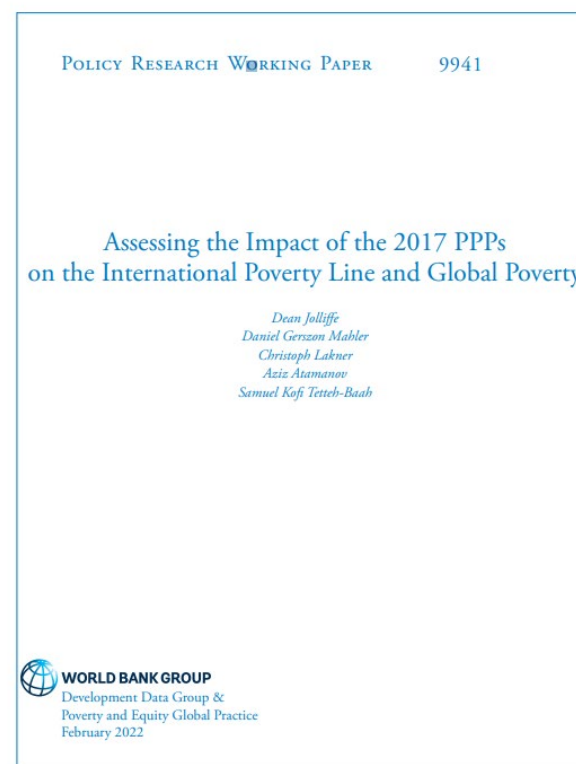
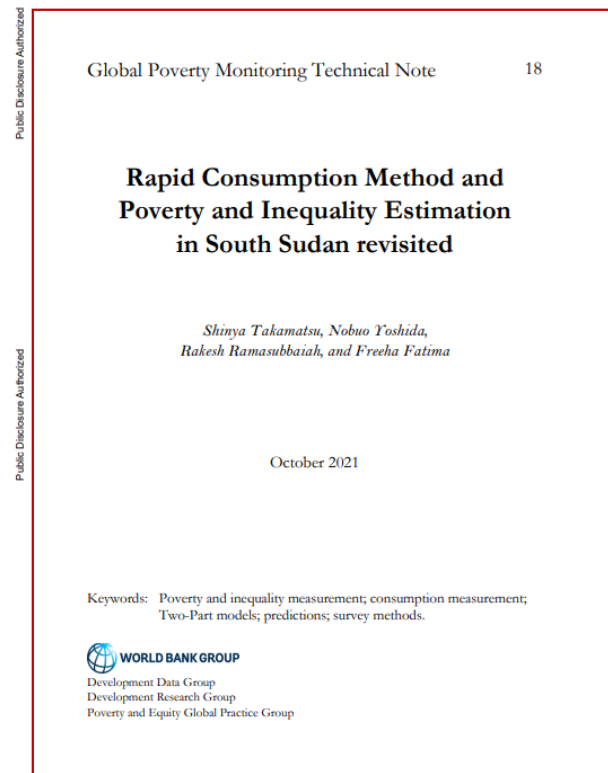
**May 4, 2023 10:30 am ET**



Details: <https://www.worldbank.org/en/events/2023/04/05/let-s-talk-data-accessing-the-world-bank-s-estimates-of-poverty-and-inequality>

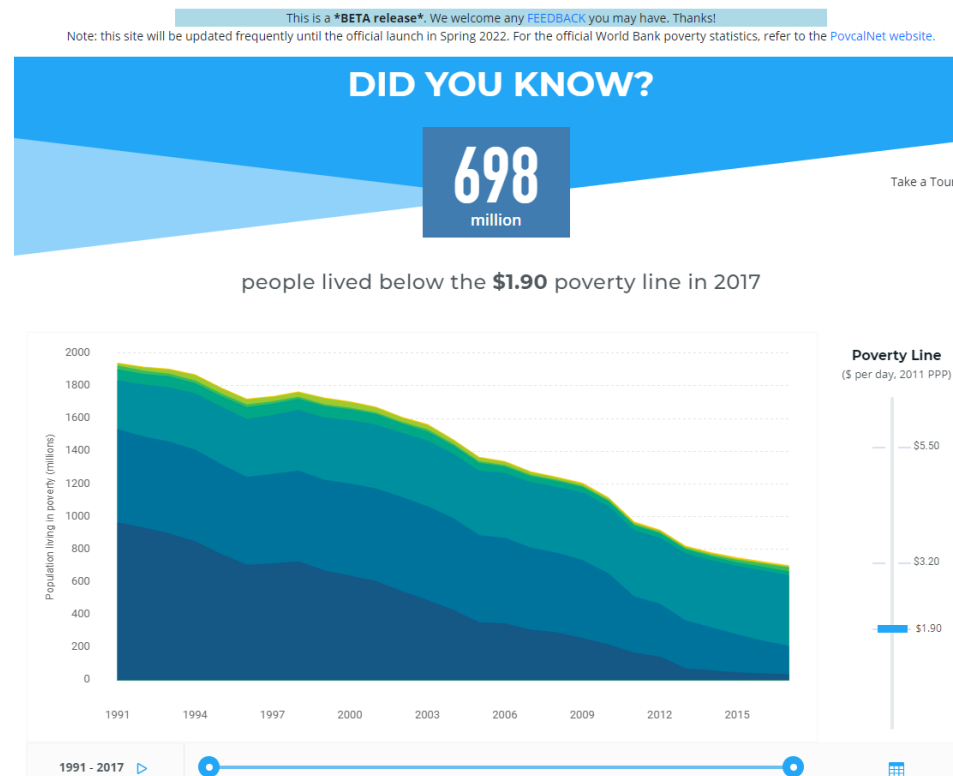
# Quality, accessibility, and transparency

- All major methodological decisions are peer reviewed internally and/or externally and documented through Global Poverty Monitoring Technical Notes or Policy Research Working Papers.



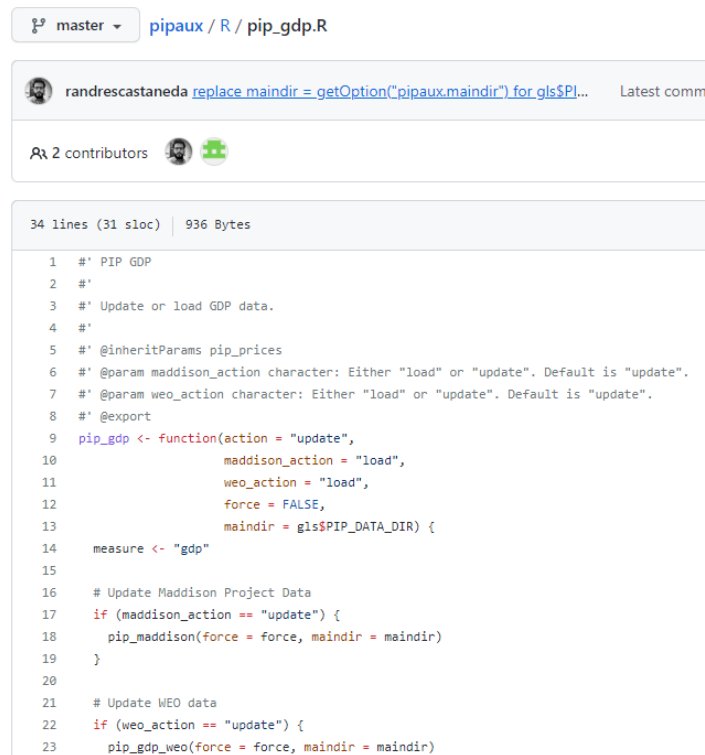
# Quality, accessibility, and transparency

- All estimates can be accessed through the Poverty and Inequality Platform (PIP) ([www.pip.worldbank.org](http://www.pip.worldbank.org)).
- PIP is a comprehensive platform for all the World Bank's poverty and inequality data
- The data can also be accessed through API-based solutions
- Where data sharing agreements permit, the anonymized microdata are accessibly through PIP's Statistics On-Line (SOL) tool ([www.pip.worldbank.org/sol](http://www.pip.worldbank.org/sol))



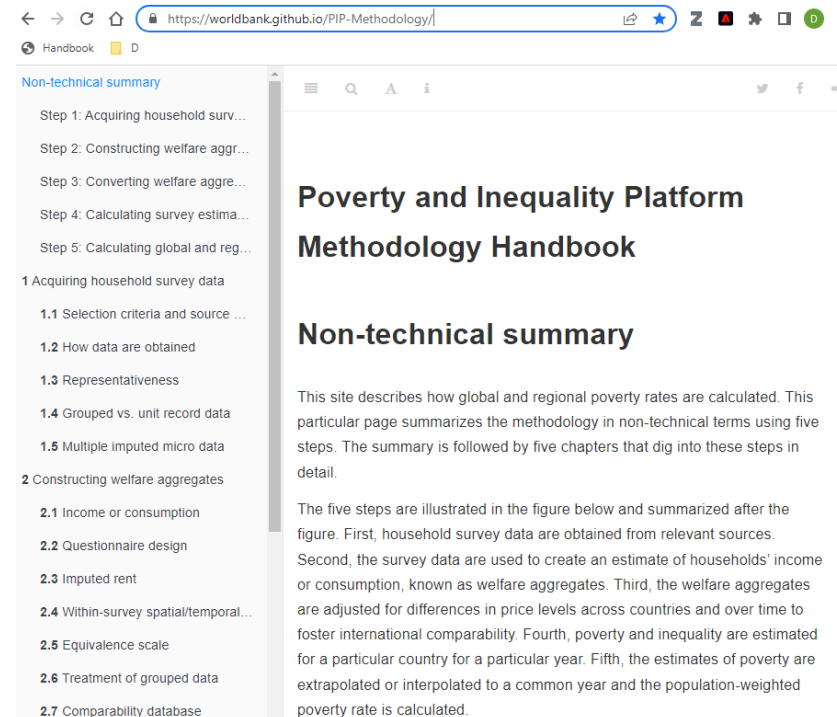
# Quality, accessibility, and transparency

- All code necessary to create the poverty estimates are publicly available (<https://github.com/PIP-Technical-Team>)
- A description of the entire methodology is available in a technical handbook (<https://worldbank.github.io/PIP-Methodology/>)



The screenshot shows a GitHub repository for the file `pipaux / R / pip_gdp.R`. The repository is owned by `randrescastaneda` and has 2 contributors. The file is 34 lines long (31 sloc) and 936 Bytes. The code is as follows:

```
1  #' PIP GDP
2  #'
3  #' Update or load GDP data.
4  #'
5  #' @inheritParams pip_prices
6  #' @param maddison_action character: Either "load" or "update". Default is "update".
7  #' @param weo_action character: Either "load" or "update". Default is "update".
8  #' @export
9  pip_gdp <- function(action = "update",
10                    maddison_action = "load",
11                    weo_action = "load",
12                    force = FALSE,
13                    maindir = gls$PIP_DATA_DIR) {
14    measure <- "gdp"
15
16    # Update Maddison Project Data
17    if (maddison_action == "update") {
18      pip_maddison(force = force, maindir = maindir)
19    }
20
21    # Update WEO data
22    if (weo_action == "update") {
23      pip_gdp_weo(force = force, maindir = maindir)
```



The screenshot shows the `https://worldbank.github.io/PIP-Methodology/` website. The page title is `Poverty and Inequality Platform Methodology Handbook`. The page content includes a `Non-technical summary` section, which is currently expanded. The summary describes how global and regional poverty rates are calculated, starting with acquiring household survey data and ending with calculating global and regional poverty rates. The summary is followed by five chapters that dig into these steps in detail.

## Poverty and Inequality Platform Methodology Handbook

### Non-technical summary

This site describes how global and regional poverty rates are calculated. This particular page summarizes the methodology in non-technical terms using five steps. The summary is followed by five chapters that dig into these steps in detail.

The five steps are illustrated in the figure below and summarized after the figure. First, household survey data are obtained from relevant sources. Second, the survey data are used to create an estimate of households' income or consumption, known as welfare aggregates. Third, the welfare aggregates are adjusted for differences in price levels across countries and over time to foster international comparability. Fourth, poverty and inequality are estimated for a particular country for a particular year. Fifth, the estimates of poverty are extrapolated or interpolated to a common year and the population-weighted poverty rate is calculated.

- 1 Acquiring household survey data
  - 1.1 Selection criteria and source ...
  - 1.2 How data are obtained
  - 1.3 Representativeness
  - 1.4 Grouped vs. unit record data
  - 1.5 Multiple imputed micro data
- 2 Constructing welfare aggregates
  - 2.1 Income or consumption
  - 2.2 Questionnaire design
  - 2.3 Imputed rent
  - 2.4 Within-survey spatial/temporal...
  - 2.5 Equivalence scale
  - 2.6 Treatment of grouped data
  - 2.7 Comparability database



# PIP using Stata: Installation

- ▶ Install PIP Stata module from github by running the following command in Stata (It will be available from SSC soon.)

```
net install github, from("https://haghish.github.io/github/")
```

```
github install worldbank/pip
```

- ▶ Note that there might be an issue when installing from Github if connected to the VPN. We recommend disconnecting from the VPN.
- ▶ For details see: <https://worldbank.github.io/pip/>
- ▶ Please report any other issues installing the wrapper here: <https://github.com/worldbank/pip/issues> or send an email to [pip@worldbank.org](mailto:pip@worldbank.org)

# PIP resources

- PIP how to videos: <https://pip.worldbank.org/use-pip>
- Detailed methodology: <https://worldbank.github.io/PIP-Methodology/>
- Data updates and related publications:  
<https://pip.worldbank.org/publication>
- FAQs: <https://pip.worldbank.org/faqs>
- Questions/comments/concerns: [pip@worldbank.org](mailto:pip@worldbank.org)
- Citation: World Bank. (2022). Poverty and Inequality Platform (version {version\_ID}) [Data set]. World Bank Group. [www.pip.worldbank.org](http://www.pip.worldbank.org). Accessed {date}.